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TRANSACTIONS

3673

OF THE

Texas State Medical Association

SIXTEENTH ANNUAL SESSION,

HELD AT

Belton, Texas, April 22, 23, 24 and 25, 1884.

FORT WORTH, TEXAS:
PRINTED FOR THE TEXAS STATE MEDICAL ASSOCIATION.
1884.

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Prepared from the Stomach of the Hog; Uniform in Strength and Free from Unpleasant Odor and Taste. Ten grains of Saccharated Pepsin dissolved in one ounce of water, with an addition of ten drops of muriatic acid, will completely dissolve 150 grains of coagulated albumen at a temperature of 100° to 150° Fahr., in 4 to 6 hrs.

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ADDITIONAL ERRATA.

On page 7, for "L. B. Smith," read M. V. Smith.

On page 8, for "H. Y. Sanders," read X. B. Saunders.

On page 32. for "J. W. Sears," read J. H. Sears.

On page 241, in roll of members, for "A. B. Denton," read A. N. Denton, and for "Kilkeen," read Killeen; also,

On page 243, for "A. E. Spohus," read A. E. Spohns, and "T. J. Wilson, Austin," should be Sherman.

On page 191, Dr. Salm's article, 11th line, 5th word, should be "deny," instead of desire; 12th line, 6th word, for "eyelites" read cyclitis; 22d line, last word, for "ante," read acute; 3d line from bottom, for "straightened," read sloughed; 18th line, 7th word, for "application," read suppuration.

NOTICE.

The note on page 192 would appear to reflect on Dr. Salm. Such is not intended. In printing the Transactions it was found that his manuscript (which was not paged) was disconnected, and a large part of it was therefore necessarily omitted. It was only discovered after the work was finished that two entire pages were missing from the article; no fault of the authors, as the article was entire when read; but these two pages never came into the hands of the publishing committee, and it is not now known what became of them, they having been referred to some committee during the meeting. This is what has delayed the issue of the book, which has been ready since August 10th.

F. E. DANIEL, M. D.,
Member Publishing Committee.

Fort Worth, September 10, 1884.

149933

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Dr. R. B. White, Ennis.
Dr. H. L. Taylor, Waco.

Time and place of next meeting, HOUSTON, TEXAS, 3d Tuesday in April, 1885.

PROCEEDINGS

OF

THE TEXAS STATE MEDICAL ASSOCIATION,

HELD AT

BELTON, TEXAS, APRIL 22, 23, 24 AND 25, 1884.

FIRST DAY.

MORNING SESSION.

The Sixteenth Annual Session of the Texas State Medical Association convened in Belton Opera-House, Belton, Texas, at 10 a. m., April 22d, 1884.

The Association was called to order by Dr. A. P. Brown, President.

Prayer was offered by Rev. L. B. Smith, Pastor of the Baptist Church.

The roll of members was read, and a quorum found to be present.

Minutes of the preceding meeting were adopted as printed.

Dr. Taylor Hudson, Chairman of Committee of Arrangements, introduced Mayor D. A. Chamberlain, of Belton, to the Association, who spoke as follows:

Gentlemen of the State Medical Association, Brethren of a Proud and Noble Profession, One whose Origin Antedates the Earliest Historic Period:

Enlisted as you are in the grand and humane mission of alleviating the sufferings of the children of earth, as the chief executive officer of our city, I greet you in the name of our people with a cordial welcome, and gratefully tender to you our hospitality during your stay among us. Standing as your profession does, on the very pinnacle of usefulness, although I am myself but one of the vast multitude of non-professionals, I know I but voice a universal sentiment when I declare that yours is pre-eminently the profession around which cluster all the ennobling virtues and sympathies of life.

In what can humanity feel a safer or more abiding interest than in that which so closely concerns their physical and intellectual well being?

Who can ever forget, or learn to view with indifference the unselfish work of the faithful physician? At once the accomplished gentleman, the tried and trusted friend, braving alike the summer's heat and winter's cold, and "the pestilence that walketh in darkness" and "the destruction that wasteth at noonday."

Who does not feel that heaven's light has yet a resting place on earth as he sees him waging his unceasing war with disease and death, alike in behalf of the lisping infant or the aged and decrepit? To him it matters not where he gives battle to the great destroyer; of whom it is said "he taps with equal step at he palace of the rich or the hut of the poor." Whether on the field of carnage, amid the terrible music of the bursting bomb, and the piteous moans of the crushed and dying; whether around the squalid cot of the friendless pauper or the gilded couch of the millionaire, the same good, kind physician, with impartial thought, brings to his task his wealth of learning and experience, and applies his ministrations with all his mighty energy. Always so intent on relieving the sufferings of others, as to be totally regardless of his own health or safety. Thus, often with the same hand which soothes and heals the woes of his fellows, he plants the seeds of his own dissolution.

The science of medicine has ever been progressive, and in all ages distinguished for its great names, who have been remembered among the benefactors of our race. And as only good can spring from reunions such as yours, in conclusion, I will say, trusting your stay among us will be pleasant to yourselves and profitable to the great cause in which you are engaged, I again greet you with a cordial welcome and God-speed.

Judge H. Y. Sanders was next introduced, and spoke as follows:

Gentlemen of the State Medical Association:

Having been honored by the request of your local committee to bid you welcome, in their names I so greet you. And just here I will take occasion to remark that being myself the son of a physician who gave his life to the duties of his profession, this is to me doubly a pleasant duty, although in coming before your honorable body, composed as it is of men many of whom have achieved not only a local distinction, but a national reputation in the fields of professional and scientific inquiry, I confess to a degree of embarrassment such as I would not feel under ordinary circumstances.

Gentlemen, it has been beautifully and truthfully said that "peace has

her victories not less renowned than those of war." You have assembled in annual reunion not as politicians to ply the trade of the trickster and the demagogue, and by vexing the air with the fulsome praises of some unworthy partisan to elevate him to place and power; nor yet animated by the sordid desire of financial gain, have you assembled to take measures to further swell the coffers of that commercial world "whose merchants are princes and traffickers among the honorable of the earth;" nor yet bewildered by the temporary glamour which encircles the name of some human butcher, have you assembled to join the unthinking mass in their blind adoration, or to drown the moans of the wounded and dying and the wail of the widow and orphans in pæns to his praise. No, yours is a nobler and higher purpose, compared to the beneficial results of which the achievements of the proudest victor king who ever strode over a red battle field sink into insignificance. As in this world of ours there is a constantly recurring and never ending conflict between the elements of life and death, and since in the struggle between those two opposing forces, your profession has enlisted under the banner of life, how well it has earned its title to our gratitude and how successfully it has accomplished the great end of its high mission on earth, is well attested by its complete mastery over many of the "ills that flesh is heir to" and the gradual lengthening of the average span of human life, so palpably shown by carefully prepared statistical tables, until you can proudly say, if you have not been able to completely vanquish man's great conquerer, you can at least claim that you have been able in a measure to arrest the progress of his pale horse and check him back upon his haunches. And how has this great scientific triumph been achieved? Mainly by the efforts of organizations such as yours.

I will not attempt to speak in detail of the history of a profession to men who, of course, are much more familiar with it than I could ever hope to be. Still I may be permitted to say it is older than history itself, its existence dating from the time "whereof the memory of man runneth not back," and its origin is lost in the dim and shadowy ages of tradition and fable. And although in the earlier centuries it was much beset by the ignorance and superstition of the times, yet it has always maintained its character for dignity, learning and respectability. Its existence has always been a matter of absolute necessity and prime utility to man, and it has kept abreast with the progress of the ages. Indeed, so nearly does it concern all our lives, and so completely is it interwoven into all our domestic affairs, the story of its struggles and

its triumphs can never fail to be one of intense interest to the non-professional mind. The good, kind physician is with us from the cradle to the grave, and the memory of his good deeds is sacred to us all. We can all remember how, in childhood, with what wholesome awe we looked upon the man of pills, as with look of terrific wisdom and air of awful solemnity he approached our couch, how utterly stunned we were as he discoursed of our ailments in words of "learned length and thundering sound." How, as with mesmeric touch, he soothed our fevered pulse, and with well directed potion he soothed us into peaceful and healthful slumber. How, as the years grew apace, he was the trusted friend and adviser of our youth and the valued companion of our manhood's riper years; and how, when at last worn out by his intense life struggle in behalf of his fellows, he sank to rest, we wept as we stood by his grave, and sighed for the sound of "his fettered footstep which could come no longer."

If it be true, as it doubtless is, that the grandest gift of God to man is that of another good and true and useful man, then without doubt may your profession take high rank among the public benefactions to our race. For wherever a wound is to be healed or dressed, wherever a human pang is to be assuaged, whether in the quiet and peaceful walks of private and domestic life, or amid the grand diapason of battle; whether in the stately palace of the money king, or around the deserted couch of the lonely outcast of earth, we find this same true professional ministering with equal and impartial zeal and energy. When the withering breath of pestilence is sweeping over nations, holding its high carnival of death; when, in many instances, the minister deserts his flock, and the parent his stricken household, as the angel with his flaming sword is said to have guarded the gates of Paradise against the intrusion of sin, so do we find him with unflinching firmness, standing like a lion in the path of the destroyer, battling with a heroic manhood in behalf of his fellows, and often with absolute self-renunciation perishing himself in the discharge of his duty. So prolific has been your profession in furnishing these noble examples, that to attempt their enumeration would be a vain and useless task. But I may be permitted to speak of one who went from among us, and who, if I mistake not, was a member of your organization. Of him, the brilliant and chivalrous gentleman and accomplished scholar, who, when the tale of sorrow and the piteous appeal from his fever-stricken countrymen of the Valley of the Mississippi, was borne to his ears along the whisper-

ing wire, added another chapter to the heroic grandeur of life. Of him, who, with a grander courage than that of famous Rancesvalles, when perished the harnessed chivalry of Spain, or of Cardigan's immortal "six hundred," who rode into the "jaws of death" on the bloody field of Balaklava, this plumed knight of your profession boldly entered the lists of death, and fell a victim to his own generous impulses, ministering at the high altar of humanity. I allude to the lamented Manning, who died all too soon, and the lesson of whose life is a sacred legacy to us all. He has erected his own monument, "which is more durable than brass and loftier than the kingly heads of pyramids." But Manning has not died in vain; the record of his useful and honorable life and glorious death has at least served to remove from the minds of the masses many unfounded prejudices hitherto entertained by them against this useful and noble profession. It has taught them the memorable lesson that while of course your toils and sacrifices should be requited with a suitable pecuniary compensation, yet that it is not simply a mercenary profession, that it has higher aims, and can and does accomplish nobler purposes. Besides, "when death strikes down" the noble, the useful and the true, "for every fragile form from which he lets the panting spirit free, a thousand virtues rise in shapes of mercy, charity and love, to walk the earth and bless it; for every tear that sorrowing mortals shed on such honored graves, some good is born, some gentler nature comes. In the path of the destroyer there spring up bright creations that defy his power, and his dark path becomes a way of light to immortality." And while the memory of Manning will be cherished with equal veneration and esteem by all classes of his countrymen as an honor both to the State and profession to which he belonged, the light of his grand example will serve to direct others along the same great pathway of true philanthropy.

And now in the name and behalf of our community, I welcome you to our hearts and homes as our honored guests, assuring you of our high sense of the honor you have conferred upon us by your presence, and of our heartiest wishes for the future success and prosperity of your organization.

The President, Dr. A. P. Brown, replied as follows:

In answer to the eloquent remarks from the gentlemen appointed to welcome the Texas State Medical Association to Belton, we say we

thank you, one and all. When your beautiful little city was selected at Tyler for our next meeting, some shook their heads, but when the iron horse brought us to your beautiful borders, and we found the whole people out to welcome us with a generous hospitality, this fear was dispelled, and these beautiful ornamentations by gentle woman's hand, reminding us of our loved ones at home, is sufficient to show our welcome. And, gentlemen of city authorities, and you gentlemen of the Committee of Arrangements, we tender special thanks for asking us to occupy the seats so recently vacated by those grand old Texas veterans, whose valor made it possible for us to enjoy this beautiful land.

He then announced the Association ready to proceed with the usual business.

The officers of the Association were invited upon the platform. Members of the press were also invited to seats.

Drs. C. W. Kelley and W. H. Galt, of the Louisville Medical College, were introduced and invited to seats and to participate in the discussions of the Association.

After this the President made a number of suggestions as to the plan to be adopted in acting upon many matters of interest to the State, the profession and the Association. They were as follows:

CUMULATIVE INVESTIGATION.

While it is a lamentable fact that some men write too much, it is equally true that there are those who do not write enough, and by such neglect of real duty lock up many valuable facts which are often too dearly obtained to be lost, and should not perish with their possessors, or be simply handed down by tradition, or made a family secret for the next eldest in the family. The perfection of science is classified. Knowledge and science are developed by improved methods of classification, and in this our great branch of science can best be forwarded by cumulative efforts, and in our Association by a method of rivalry in a community of interest in the effort at a compilation of clinical facts.

Hence, I advise that while you continue your sections, as heretofore, the effort be made to make each member of the Association an active worker in the accomplishment of this end, and that you divide the membership into classes of eighteen, twenty, or thirty, each, and have each of the members write and present their views and experience on the same subject. Thus, twenty on peritonitis, etc.

What a volume, in five or ten years, this would be, and to the Texas student beyond price. Let us have it.

LAW AND PRACTICE OF MEDICINE.

In all countries as free as ours there are persons whose virtue nor presence add anything to the dignity or value of our profession, nor profit to the public, nor honor to the State; hence it is the duty of the State to regulate the practice of these characters, and it is believed that our law-makers view this body of men with sufficient respect to hear our petitions, and acknowledge in you sufficient sincerity, patriotism and intelligence to formulate such laws as should govern the practice of medicine in this State. Hence, you are earnestly recommended to select, or authorize the selection, of a suitable committee of your fellows to draw up such laws as will protect the people, and lead to a higher standard of proficiency in the medical faculty. The druggist and his practice should also receive your attention.

LIBRARY AND MUSEUM.

Nothing gives more pleasure than a well selected library and attractive museum, and the State should be urged to foster these by giving this Association material aid and ample rooms at the University for the perfection of this design.

QUARANTINE.

While our State laws on quarantine, with the aid of the General Government, have resulted in great good, they do not contemplate vital statistics, nor interior sanitation proper; and it is believed that a State Board of Health would more effectually accomplish the work designed, and give more satisfaction and relief; hence you are recommended to continue your work began at the Sherman meeting, as your action at that time aroused both the people and legislature, and prompted all the good quarantine laws yet enacted by Texas.

CONTROL OF UNIVERSITY.

It is believed that at this session you should take some action looking to the control of the issue of medical diplomas from our University, and while it is not difficult to procure the services of Professors, in Texas, perfectly competent to teach medicine and surgery, it is believed that a Board of Examiners, separate from those who teach, should examine and pass on the worthiest of applicants for medical degrees, and that this plan would not be derogatory to the honor or standing of the University Professor; and it is believed this Association should name that Board of Examiners, and that they should determine the

length of time of study, and that the scholastic or literary attainments of those applying for positions as students in our offices should have your consideration; and that the expression of your opinions on this point should at least be promulgated. In no other way could you elevate higher the standard of medical education.

CORONERS.

It is believed that justice is often thwarted by inquests being held by incompetent persons, and I would recommend that you urge the legislature to create the separate office of coroner for each county, and that he may be untrammeled, let him be appointed by the governor, and that the office be filled only by a physician.

PATENT MEDICINES AND POISONS.

Much good might follow and fraud be prevented or danger averted if our State laws, as in several other countries, compelled all patent medicine manufacturers or sellers to have a certified prescription accompanying each package prepared or sold, and that poisons should be better indicated by "danger" labels or uniformly recognized packages.

CRIMINAL ABORTION

Is frightfully on the increase, as is well known and fully demonstrated by the reports of sextons and Boards of Health. "Premature" and "still-born" constitute a large percentage of the death list, and you are asked to encourage further legislation on this matter.

TRAINED NURSES.

Judicious nursing by trained hands often determines the result of disease. Acclimated and educated nurses are scarce in our State, hence I advise you to urge the proper authorities to establish in the Medical Department of our University a chair for the instruction of nurses.

PHARMACOPŒIA.

Your recommendations to our representatives in Congress, relative to the publication of the pharmacopœia by National authority, should be had at this session, as by it we will have a legally issued authority, rather than that of general recognized acceptation, which, at all times, may give us an authority by which we can speak *ex cathedra*. Also, the continuation of aid to the publication of the *Index Medicus*.

It might be well to give expression to your views on revenue duty on raw material of prime medical need—not luxuries.

RAILROAD HOSPITAL.

Being satisfied that our section on psychology is not prepared to admit that "corporations have no soul," it is deemed a duty to recommend to you to attempt to protect a very large number of our people who, monthly, are forced to pay assessments to keep up hospitals, outside and within our State; or, when crushed and bleeding, to await the slow process of applying through some overworked local agent, who must telegraph to some higher authority along his line, who in turn sends the news to some far-off head centre, whose special duty it is to dole out the amounts from these forced contributions. Humanity and common sense demand a change, and the power who incorporated these present monopolies reserved the right to enact laws by which they are governed. Do your whole duty, gentlemen, to the wounded and sick.

PROPERTY IN A PRESCRIPTION.

It is believed that an authoritative statement of your opinion as to whom a prescription correctly belongs, whether to the doctor, the patient, or the druggist, would be of great interest and value. This matter has caused much trouble, and deserves to be settled by your voice.

REGISTER OF POISON SALES.

With no desire to abridge the liberty of any, but to protect life or avert danger, it is my duty to recommend that you advise the legislature to enact the law that will require all persons selling or transferring medicines generally known as poison, to keep a register of such sale or transfer, giving name, date and amount purchased, and make a failure to comply with the law a punishable offence.

ASYLUM FOR INEBRIATES.

It is believed that an asylum for inebriates is demanded; ten years of urging our legislature, and of vigorous efforts at educating the people up to this idea, would be well spent, and thousands of acres of our idle asylum lands would be judiciously appropriated, and richly repay the State that performed this great charity. As no other body has taken the initiative in this matter it is presented for your action.

HOUSES OF CORRECTION.

Closely allied to the former subject is a vexed one to which good men have given much time, money and thought, and many beautiful

Q. C. Smith,
S. H. Stout,
W. H. Hardison,
C. T. Cooper,
T. J. Bell,
Thos. J. Bennett,
C. W. Ramsdell,
J. J. Dial,
W. M. Wells,
J. W. Irion,
T. M. Lewis,
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M. K. Lott,
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S. G. Harper,
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J. M. Isbell,
W. K. McCardell,
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A. E. Enochs,
S. D. Thruston,
C. F. Walker,
D. W. Claywell,
L. T. Batte,
Jas. J. Robert,
J. D. Rogers,
W. T. Evans,
B. C. Mitchell,
W. L. Rogers,
J. E. Gilcriest,
J. R. Rucker,
Jno. F. Starley,
E. V. Jarrett,
B. J. Brown,
A. M. Armstrong,
Powhattan Jordan,
S. T. Turner,
R. B. Grammer,
M. T. Emanuel,
E. P. Becton,
W. B. DeJernett,
A. W. Fly,
J. A. White,
A. M. Armstrong,

Dr. Nathan Bozeman, of New York, elected an Honorary Member.

The following County Medical Societies were recognized by the Judicial Council:

Fayette County Medical Association.
Southeast Texas Medical Society.
Long Medical Society.
Lampasas County Medical Society.

Leon County Medical Society.
Waco Medical Society.
Travis County Medical Society.
Hill County Medical Society.
Fort Worth and Tarrant County Medical and Surgical Society.
Dallas County Medical Society.
Johnson County Medical Society.
Ellis County Medical Society.
West Texas Medical Association.
Bell County Medical Association.
Association adjourned until 2 P.M.

AFTERNOON SESSION.

Dr. A. R. Kilpatrick, of Navasota, made a report on necrology, giving the following names of members of the Association who have died since last annual meeting:

Dr. Marcus L. Campbell, Galveston.
Dr. E. H. Watts, Galveston.
Dr. T. J. Norris, Brenham.
Dr. J. W. Slatnaker, Austin.
Dr. D. C. Miller, Golinda.
Dr. Leonard D. Locke, Dallas.

Sections were then called. Dr. J. D. Osborne, First Vice-President read a report of a complicated and difficult ovariotomy, by Dr. Nathan Bozeman, New York City. Refered to Committee on Publication.

Dr. E. P. Becton, of Sulphur Springs, nominated Dr. Bozeman as an honorary member. Referred to Judicial Council, and upon favorable report was declared elected.

Dr. Sam. Burroughs, of Guy's Store, offered the following resolution, which passed, by a rising vote, unanimously, and was telegraphed to the Texas Veterans, in session at Paris, Texas.

BELTON, TEXAS, April 22, 1884.

To the President Texas Veteran Association, Paris, Texas:

The Texas Medical Association, in convocation assembled, sends greetings and respects to the Texas Veteran Association. May your days be long in the land you freed. May the blessings of millions yet to come cling around the memory of your noble band. A. P. BROWN, M. D., *President.*

Section on Practice of Medicine and Materia Medica was called. Dr. J. C. Loggins, Chairman, called the Section to order. Dr. R. P. Talley read a very interesting paper on the use of bi-muriate of quinia and urea, contending that, used hypodermically, it is more efficient than quin. sulph., and not irritating to the tissues into which it is injected. The paper appears in transactions.

Dr. Sam'l H. Stout, of Cisco, read an elegant *resume* of the present opinion of the profession on continued fevers, contending that typho-malarial fever, or typhoid fever, would not correctly classify it, and believing it more nearly allied to a catarrhal form of enteric fever. Quite a discussion was provoked. Dr. J. Sears, of Waco, believed, for all practical purposes, that the name "continued fever" was sufficiently accurate. He believed resorcin and quinine the best treatment. Dr. C. W. Kelly, of Louisville, gave some very interesting remarks on the subject. Drs. W. H. Galt, of Louisville; J. C. B. Renfro, Lagrange; J. S. Sanders, Bonham; J. M. Willis, Wooten's Wells; George Cupples, San Antonio; J. C. Milner, Gainesville; R. B. White, Palmer; J. J. Burroughs, Houston; R. P. Talley, Belton; Will B. Davis, Grapevine, and others, engaged in this discussion, but developed nothing new on the subject.

Adjourned to Wednesday morning, 9 o'clock.

SECOND DAY.

MORNING SESSION.

April 23, 1884.

Association called to order by President, Dr. A. P Brown, and opened with prayer by Dr. Milner, of Gainesville.

Minutes of yesterday read and adopted.

Special Committees were called to report.

Dr. J. M. Willis, Chairman of Committee to Report on the Mineral Waters of Texas, read his report, confining it almost entirely to the eulogy of the Wooten's Well Waters, of Robertson county. Paper referred to Committee on Publication.

Drs. J. J. Dial and E. P. Becton made some remarks upon the waters, and their therapeutic value, of Sulphur Springs, Hopkins county.

Drs. C. M. Ramsdell and T. J. Letcher gave some statistics and analyses of the waters of Lampasas Springs.

Drs. Connerly and Stallcup mentioned the waters of Cass county, as being very beneficial where iron was indicated, as they contained a large per cent. of sulphate of iron.

Dr. Folsom, of McGregor, spoke of the sulphur and magnesia water of his place.

The report of the Committee on Publication was read by Dr. W. J. Burt, Chairman, and on motion of Dr. J. D. Osborne, of Cleburne, the report was adopted, and Dr. Burt paid the sum of $150.00 for his work in getting out the transactions for 1883.

REPORT.

BELTON, TEXAS, April 22, 1884.

Dr. A. P. Brown, President Texas State Medical Association:

SIR—Your Committee on Publication, for the year 1883, begs to report that the transactions were published in pamphlet form, in accordance with the requirements of the Association; 400 copies, of 316 pages each, were printed for $316.00. One copy was mailed to each member of the Association; one to the Secretaries of the several State Societies; 36 copies to Medical Journals; a few copies to medical gentlemen in other States, and a few to leading newspapers and local societies. Owing to the fact that the members of the Committee on Publication were living in four remote places in the State, they were never able to have a meeting. Consultation in reference to committee's work was carried on by correspondence. In consequence of this, the onerous work of preparing and arranging articles for publication, the reading of proofs and directing the whole work fell upon the shoulders of our Chairman, who sacrificed a large amount of time and performed labor in the matter that should be fitly recognized by this Association. We would suggest the following recommendations:

1. That the transactions for this year be printed in pamphlet form.

2. That three members compose the Committee on Publication, and that they live at or near the same location.

3. That members be more careful and critical in preparing articles; which articles, to be entitled to a place in the transactions, should present *new facts, new modes of practice, principles of real value, original experimental researches*, or so complete a statement of facts as to enable the writer to deduce therefrom legitimate conclusions of importance to the profession.

W. J. BURT, *Chairman*,
SAM R. BURROUGHS,
T. R. CHEW.

A resolution was offered directing the officers of the Association to have the Texas State Medical Association chartered.

A tion was postponed until the 24th, and was then rejected, as it was not thought necessary to procure a charter for the Association.

Dr. Loggins, Chairman of the Special Committee appointed by Dr. A. P. Brown, on his recommendations, made his report.

The report on poisons and patent medicines was a statement that good results would follow proper legislation.

The paper was referred to the Committee on Legislation.

The reports in reference to criminal abortion and coroners were read, but no action was taken by the Association.

Drs. J. W. McLaughlin and D. F. Stuart, Committee on Legislation, mad' their report, which advocated a few changes in the Penal Code, to make effective the law regulating the practice of medicine, passed in 1876.

Papers to be referred to Committee on Legislation, when appointed.

Dr. George Cupples, of San Antonio, read a very concise and interesting communication on the practice of medicine from a legal standpoint.

The paper was referred to the Committee on Legislation.

Dr. Frank Allen read his report in reference to practice for charitable institutions, making recommendations for legislative action.

The paper was referred to the committee on that subject.

Dr. J. C. B. Renfro offered the following resolution, which was adopted:

RESOLUTION.

That all the papers on legislation be referred to the Committee on Legislation, and authorize that committee to draw up such a bill or measure as it deems expedient, and carry it before the Nineteenth Legislature and urge its passage.

Another resolution was offered to have 1,000 copies of said bill printed for distribution, which was also adopted.

Adjourned until 2 p. m.

AFTERNOON SESSION.

Association called to order at 2:30 P.M.

Section on Practice of Medicine was recalled; Dr. J. C. Loggins in the Chair.

Dr. C. M. Ramsdell read a very fine article, reporting a number of cases of "Cestoidea," giving a lucid history of intestinal parasites. Referred to Committee on Publication.

Dr. C. R. Johnson read a paper on the use of hot water in heart failure following the use of chloral. Paper referred.

Drs. Gibson, Pitts and Dudley discussed the question.

Dr. J. C. Milner presented a paper on alcohol, ignoring its effects as a medicinal agent. This brought out a lively debate by Drs. Q. C. Smith, C. W. Kelley, S. H. Stout and Dr. Palmer, contending that alcohol is both a food and medicine. Referred to Publication Committee.

The following telegram was read:

PARIS, TEXAS, April 23, 1884.

To the Texas State Medical Association, Belton, Texas;

The Texas Veteran Association reciprocates your courtesy, and invokes God's blessings on your labors for the relief of suffering humanity.

A. DEFFENBAUGH, *Secretary.*

Section on Surgery was called; Dr. H. W. Moore, of Fort Worth, Chairman, and Dr. Will B. Davis, Secretary.

Dr. H. W. Dudley, of Hillsboro, presented a paper—Animal Ligatures and Sutures—presenting some beautiful specimens from the Texas "mule-eared rabbit." Paper referred.

Dr. E. W. Rush, of Paris, presented a paper—Stricture of the Male Urethra—and Dr. C. M. Ramsdell one—Successful Operation in Knee-Joint Amputation. Both papers referred.

Dr. J. D. Osborne reported a case of mulberry calculus in a girl 4½ years old, removed from the urethra without an operation. Calculus was ¼ x 1 inch in size. Dr. Osborne was requested to write out the report and hand to Committe on Publication.

Dr. C. W. Truehart, of Galveston, reported a case of periosteum grafting, where a piece of periosteum was removed from a dog and transferred to man with the result of a reproduction of 2¾ inches of clavicle. This was well received.

Dr. Talley said he did not believe that bone grafting from a dog made us any more a dog.

Dr. A. P. Brown believed the osteogentic might be thus established, and thinks the operation a "dog-gone" good one.

Dr. H. W. Moore read the following articles by caption, and they were all referred to Committee on Publication:

Dr. A. W. Acheson—"Injury to Kidneys;" by same, "Diphtheria Following Scarlet Fever."

Dr. Edward Goldmann, Monterey, Mexico—"Antagonism Between Syphilis and Carcinoma." Paper very interesting and scientific.

Association adjourned until 8 A. M.

THIRD DAY.

MORNING SESSION.

Association convened at 9 A.M., and opened with prayer by Rev. Mr. Smith.

The report of the Judicial Council in reference to Art. VII. of the Constitution is as follows:

The Judicial Council interprets the meaning of Art. VII. of the Constitution as follows: Each member of the Texas State Medical Association who is in good standing shall be entitled to one vote, and if he be also a delegate from a Society or College, properly authorized, shall be entitled to an additional vote.

County Medical Associations shall be entitled to send two delegates for the first ten members, and one for each five additional members. Medical Colleges conforming to the ethics governing this Association, chartered by the State, and having seven or more Professors, shall be entitled to two delegates.

Believing that Art. VII. is so vague and indefinite that it does not express the meaning that was intended by the framers of the Constitution, and that it is important and right to be permanently and properly interpreted, the Judicial Council asks that a committee of three be appointed to draft an article to take the place of Art. VII., and which shall conform with the interpretation.

W. A. ARCHER, *Secretary.* M. H. OLIVER, *President.*

Drs. D. F. Stuart, S. F. Starley and S. D. Thruston were appointed, in conformity with the recommendations of the Judicial Council, and made the following report:

To the President of the Texas State Medical Association:

Your committee, to whom was referred the interpretation of Art. VII. of the Constitution, have had the same under consideration, and recommend the above of the Judicial Council be held as the permanent interpretation of said article.

D. F. STUART,
S. F. STARLEY, } *Com.*
S. D. THRUSTON,

The hour (10 a. m.) having arrived for considering the question of chartering and incorporating the Texas State Medical Association, the following resolution was introduced and referred to the Judicial Council, after much discussion:

WHEAEAS, It is believed that, to make the Texas State Medical Assoeiation an incorporated and chartered institution, will increase its usefulness and place it upon a more solid and enduring basis, therefore

Resolved, That a committee of five members be appointed to procure the incorporation of, and a charter for, the Texas State Medical Association, embodying all the privileges of and responsibilities arising from such incorporation.

Resolved, That the Nominating Committee be required to appoint this committee and that it (the committee) report at the next annual meeting.

W. A. ARCHER,
M. H. OLIVER,
J. C. B. RENFRO,
L. J. RUSSELL,
E. J. BEALL,
C. F. PAINE,
W. F. STARLEY,
TAYLOR HUDSON,
W. P. POWELL,
G. W. KERR.

The following resolution was introduced by Dr. J. C. B. Renfro, and adopted:

Resolved, That the members of the Texas State Medical Association desire information regarding the Medical Department of the University of Texas. As two of the Board of Regents of the University are present, we would like to hear from them on the subject.

Dr. Ashbel Smith, President of the Board of Regents, was then introduced, and spoke to the resolution, stating in brief, that the State, so far, has not furnished the means for establishing the Medical Department.

The following telegram was read:

LAMPASAS, TEX., April 23, 1884.

Col. Geo. M. Snodgrass will be very glad to give the members of the State Medical Association transportation on the G. C. & S. Fe R'y., from Belton to Lampasas and return, by special coaches. W. NYDER, Agt.

The generous and kind offer was accepted, and it was understood as many members as could and would take the excursion, would go on the 4 p. m. train to-morrow.

SECRETARY'S REPORT.

BELTON, TEX., April 22d, 1884.

Dr. A. P. Brown, President Texas State Medical Associatiou:

SIR:—I take pleasure in stating that the Texas State Medical Association is in a state of prosperity and gives assurance of great usefulness and a high standing in the profession. The regular correspondence through the year has been more, probably, than any preceding year.

A number of medical journals have printed complimentary notices of the Association and of the transactions for the year 1883.

The printing of 400 copies of the Transactions by the Publishing Committee (as alluded to in their report), and for paper and twine and postage on same, cost $343.40

The incidental expenses of the Secretary, including postage, paper, envelopes, express, and printing and mailing 1,000 copies of the President's Circular Address, amounts to $48.90. Total expenditures, $392.30.

TREASURER'S REPORT.

HOUSTON, TEX., April 20, 1884.

(Dr. J. Larendon, Treasurer, in account with Texas State Medical Association :)

1883.	DR.		
April 28th,	To balance on hand last report	$489 71	
"	To amount annual dues collected	886 00	
Oct. 16th,	To amount annual dues from F. C. Ford	15 00	
	To amount annual dues from R. H. Harrison	5 00	$1,395 71
1883.	CR.		
April 28th,	By amount paid C. H. Wilkinson	$ 6 00	
	By " " Secretary's salary	200 00	
	By " " Treasurer's salary	100 00	
	By " " W. J. Burt	40 55	
May 19th,	By " " C. H. Wilkinson	2 10	
Aug. 30th,	By " " W. J. Burt, for Transactions	100 00	
Sep. 24th,	By " " " " "	240 00	
	By " " postage and money-order fees	4 55	
	By balance cash on hand	202 51	
	By " " deposit in Houston Savings Bank	500 00	$1,395 71
	To balance cash on hand	202 51	
	To " " deposit in Houston Savings Bank	500 00	
	Total cash on hand this day	$702 51	$ 702 51
	Amount collected at this meeting		$1,045 50
	On hand		$1,748 01

Respectfully submitted, J. LARENDON, Treasurer.

On motion of Dr. J. H. Sears, the report was adopted and $150 00 given him as a compliment.

The committee appointed to prepare a bill to regulate the practice of medicine, through the Chairman, Dr. Cupples, made their report. They recommended the adoption of the following bill, which was read by Dr. F. E. Daniel, a member of said committee, by request of the Chairman, and submitted.

A BILL TO REGULATE THE PRACTICE OF MEDICINE IN THE STATE OF TEXAS.

Be it Enacted, By the Legislature of the State of Texas:

SECTION 1. That no person shall practice medicine in the State of Texas unless he shall have received a license to practice, and shall have registered the same as hereinafter provided.

SEC. 2. T hat there shall be established Boards of Censors in the State of Texas—one board in each Congressional District—whose duty it shall be to examine into the qualifications of applicants for such license.

SEC. 3. That the Boards of Censors in each district shall be composed of two practicing physicians, resident of that district, appointed by the Governor, upon recommendation of the Texas State Medical Association, and confirmed by the Senate; and if the Senate be not in session at that time, they may be confirmed at the next session thereof. In case the members of said board shall differ in their opinion as to the qualifications of any applicant, the record of the examination hereinafter provided for, shall be forwarded to the Secretary of the State Board of Health, who shall decide between them, and shall issue or withhold the license, as the case may be.

SEC. 4. That examinations for license shall be in writing, and each Board of Censors, in their examination for license to practice medicine, shall be governed by such rules and regulations as shall be prescribed by the State Board of Health; *provided*, said board shall not discriminate against any applicant on account of the system of practice he may advocate, and the State Board of Health shall have jurisdiction in cases of appeal from any decision of the Board of Censors. Any applicant for license whose application has been endorsed "unfavorable," may appeal from such decision to the State Board, provided such appeal is claimed by the applicant by a notice in writing, lodged with the Secretary of the State Board of Health within thirty days from the decision of the Board of Censors. The State Board shall decide such appeals on the written examination filed with the Secretary at the meeting succeeding the filing of the notice of appeal.

SEC. 5. That applicants for license nnder this act shall make their applications in writing, stating, 1st, name in full; 2d, nativity and age; 3d, residence and postoffice; 4th, time spent in professional studies; 5th, physician or preceptor under whom studies were pursued, with postoffice address; 6th, courses of medical lectures attended; 7th, name of medical schools attended; 8th, if a graduate, name of college granting diploma; 9th, time spent in hospital, if any; 10th, time of practice, if any; 11th, school of practice chosen; 12th, references as to character.

SEC. 6. That applicants for license shall be examined only on the following branches of Medicine, viz: Anatomy, Chemistry, Obstetrics, Materia Medica and Therapeutics, Physiology, Pathology, Surgery and Hygiene.

SEC. 7. That applicants for license shall deposit with their application each a fee of $15.25 (fifteen dollars and twenty-five cents), fifteen of which shall be appropriated to the uses of the Board of Censors as their remuneration, and out of which the expenses of advertising the time and place of meetings of said Boards of Censors, as is hereinafter provided, shall be paid, and twenty-five cents of said fee shall be forwarded to the Secretary of the State Board of Health as a fee for services hereinafter provided for.

SEC. 8. That an applicant for license, whose examination proves satisfactory to the Board of Censors, shall have a certificate to that effect furnished him by the Board of Censors, which certificate shall entitle him to practice medicine in the State of Texas for thirty days from the date thereof, and it shall be the duty of the Board of Censors to endorse the application "Favorable," and forward it together with the record of the

examination, with twenty-five cents, to the Secretary of the State Board of Health, who shall register said application in a book kept for that purpose, and file it for future reference.

SEC. 9. That in case a favorable endorsement is given the application, the State Board of Health, through their Secretary, shall forward at once to the applicant a license to practice medicine in the State of Texas, and such license shall bear upon its face all the statements that appear upon the application, and shall be signed by the Secretary and sealed with the seal of the State Board of Health.

SEC. 10. That in case the examination of an applicant proves unsatisfactory to the Board of Censors, his application, endorsed "Unfavorable," shall be returned to him, together with fifteen dollars of the fee of fifteen dollars and twenty-five cents, which has been deposited by the applicant on presenting his application, and the twenty-five cents shall be forwarded to the Secretary of the State Board of Health as his fee for recording the application and result of the examination, a transcript of which examination shall be sent him at the same time.

SEC. 11. That in case the Board of Censors are unable to decide as to the qualifications of any applicant, and the record of his examination shall have been forwarded to the Secretary of the State Board of Health as heretofore provided, the fee of fifteen dollars and twenty-five cents shall be retained by said Board of Censors until the decision of the Secretary of the State Board of Health is announced; in case it is unfavorable, the fee to be disposed of as provided for in the preceding sections of this act—that is, fifteen dollars of the fee is to be returned to the applicant, with the application endorsed unfavorable, and the twenty-five cents to be the fee of the Secretary of the State Board of Health.

SEC. 12. That every person holding a license to practice medicine shall have a transcript of the same recorded in the office of the District Clerk of the county in which he resides, in a book kept for that purpose, and the District Clerk shall attach to said license his certificate of record, and the clerk shall be entitled to a fee of one dollar, to be paid by said licentiate; provided, that if a license be not so presented for record in sixty days from its date, said license shall be void and of no effect.

SEC. 13. That when a licensed practitioner of medicine changes his residence into a county other than that in which his license is recorded, said license must be recorded as at first, in the office of the District Clerk of the county in which he intends to reside, before he can engage in the practice of medicine in his new location, a certificate of which record shall be furnished by the District Clerk to the Secretary of the State Board of Health, for which service the Clerk shall be entitled to a fee of one dollar.

SEC. 14. That physicians living in other States near the borders of the State of Texas, engaged in the practice of medicine, whose practice extends into the State of Texas, shall obtain license to practice in this State in the same manner as is required of resident physicians, said license to be recorded in the office of the Clerk of the District Court in the county or counties in which they practice in this State, and this act shall not be construed so as to prevent physicians or surgeons from other States from treating cases in this State in charge of regular licentiates of this State.

SEC. 15. That in case a license is lost, upon application, accompanied by a fee of

one dollar, it shall be the duty of the Secretary of the State Board of Health to issue a duplicate license, in lieu of the one lost, and forward the same to said applicant.

SEC. 16. That for the purpose of examining applicants for license under this act, the Boards of Censors shall hold quarterly sessions, viz: On the first Monday in March, June, September and December of each year, at some convenient place, near the center of the congressional district in which they reside. Thirty days' notice of said session shall be given by publication in one or more newspapers published in said district.

SEC. 17. That every physician now practicing medicine in the State of Texas, by authority of a diploma which has been recorded in compliance with the laws heretofore in force, and bearing endorsement of such record, or by authority of license or certificate of qualification granted by any legal board in this State in pursuance of the laws heretofore in force, and which said license or certificate bears endorsement, to-wit: all physicians now practicing medicine in Texas, who have complied with the laws heretofore in force on the subject, shall receive their license to practice medicine without being examined as to qualification by the Boards of Censors; provided, all such physicians make application within ——— days from the passage of this act, to the Secretary of the State Board of Health, setting forth their name, age, postoffice, date of graduation, school, etc., as enumerated in Sec. 5 of this bill, together with proof that they have so complied with the laws heretofore in force relating to the recording of diplomas and certificates, which proof shall consist of the applicant's affidavit to the statements made in said application, sworn to before a magistrate or other officer, together with a copy of the license or certificate by authority of which he claims to practice, certified to by the Clerk of the District Court, in whose office such certificate or license is recorded; or if he have a diploma which has been recorded in compliance with previously existing laws, his affidavit shall be accompanied with a certificate of record from the Clerk of the District Court in whose office said diploma has been recorded. Upon receipt of such application, with such affidavit and certificates, and a fee of one dollar, the Secretary of the State Board of Health shall issue and forward to said applicant a license to practice medicine in Texas, and said applicant shall, within thirty days, record said new license in the office of the District Clerk of the county in which he resides, and shall pay said Clerk a fee of one dollar for such service. And this license shall show on its face, by endorsement of the Secretary of the State Board of Health, that it was granted under the 17th section of this act.

SEC. 18. All other persons than those who have complied with previously existing laws on this subject, shall be examined by said Boards of Censors as hereby provided; provided, this shall not apply to physicians who come into this State after the passage of this act, and who claim to practice medicine by virtue of a diploma issued by a regularly chartered medical college in good standing at the time of the passage of this act; and the Boards of Censors shall decide as to what colleges are in good standing; and said Boards of Censors shall adopt for their guide in such decisions, a reasonable schedule of educational requirements on the part of colleges issuing diplomas, which schedule shall be the minimum standard of requirements on the part of any college to be held by Boards of Censors to be in good standing; and all physicians coming

into this State after the passage of this act, and holding diplomas from colleges accredited by the Boards of Censors as being in good standing, shall receive their license as provided for in Sec. 17; and for the purpose of obtaining such decisions, all such holders of such diplomas shall submit them to the Board of Censors for examination, in the district in which said holder proposes to reside, at the first meeting of said Board of Censors; and holders of diplomas issued by colleges ruled by the Boards of Censors to be not in good standing, and holders of any and all certificates or licenses of whatever kind, except as issued by boards in this State, and previously recorded as required in the preceding sections of this act, shall be examined, and governed by the foregoing provisions as to the manner of obtaining a license.

SEC. 19. That the Secretary of State shall furnish blanks and books of record to the circuit clerks of each county, ruled and lined and otherwise prepared as may be prescribed by the State Board of Health, as necessary for the proper enforcement of the provisions of this act.

SEC. 20. That any person making false statements in his application for a license, shall be guilty of a misdemeanor, and on conviction thereof, shall be fined in a sum of not more than $25; and upon proof of such conviction, the State Board of Health shall revoke his license, and the State Board of Health shall notify the District Clerk of the county in which said license may have been recorded, and it shall be the duty of the District Clerk to erase the name of said person from the record.

SEC. 21. That for the purposes of this act the words "practice medicine" shall mean to suggest, recommend, prescribe, or dlrect or administer, for the use of any person, any drug, medicine, appliance or other agency, whether material or immaterial for the cure, relief or palliation of any ailment or disease of the mind or body, or for the cure or relief of any wound, fracture, or other bodily injury, or any deformity after having recovered; or with the intention of receiving therefor, either directly or indirectly, any bonus, gift, profit or compensation; provided, that nothing in this act shall apply to females engaged solely in the practice of midwifery.

SEC. 22. That peripatetic quacks and travelling charlatans shall not be licensed to practice medicine in this State as provided for in the 17th section of this act.

SEC. 23. That it shall be the duty of the several Judges of the District Courts to give this act in charge of the Grand Juries at every term of their several conrts; and it shall be the duty of the District Clerk of each county in th.s State to furnish a list of persons registered in their offices under this act, to the Grand Jury on the 1st day of each term of their several courts.

SEC. 24. That every persen offending against the provisions of this act, shall be guilty of a misdemeanor, and upon conviction thereof, shall, for each offence, be fined in a sum of not less than $50, nor more than $500; or, be imprisoned in the county jail not less than 10 nor more than 30 days; or, both such fine and imprisonment, at the discretion of the court.

SEC. 25. That all laws heretofore in force, in conflict with this act, be and the same are hereby repealed; and this act shall take effect and be in force from and after its passage.

A motion was made to adopt the report and bill, and have 1,000 copies printed for distribution.

Dr. W. J. Burt objected to such action as this, for we could not consider its merits at this time. And besides, the 2d section would array every medical gentleman in this State, who was not a member of this Association, against the bill; and further, the 6th section was clearly unconstitutional, and the Association could not afford to recommend such a bill by wholesale. But that the bill might be properly considered, and, if thought advisable, be recommended, he moved that the bill, with all other matters of legislation, be referred to the Standing Committee on Legislation, to be appointed by this meeting, and direct them to take such action in the premises as they, in their wisdom, might see best for all concerned; and that 1,000 copies of such bill as the committee recommend be printed for distribution.

The motion of Dr. Burt was adopted and the bill referred.

The following reports of Committees were adopted:

To the President and Members of the Texas State Medical Association:

Your committee, to whom was referred the subject of the propriety and expediency of placing on the Publishing Committee gentlemen who reside in the same city or county, and to whom also was referred the question of the propriety of increasing the number of members on your Legislative Committee, have taken the same under consideration and beg to report that: Both questions meet the approval of your committee, and we would most respectfully recommend that the Nominating Committee be instructed accordingly.

Respectfully submitted,

SAM R. BURROUGHS, *Chairman*,
R. W. PARK,
E. J. BEALL.

To the President and Members of Texas State Medical Association:

Our State laws, and the usages of County Commissioners, Boards of Aldermen, and other corporations, are made and practiced rather to encourage ignorance and quacks than to encourage and uphold intelligence.

Our code denies many a worthy man the right to compete for practice awarded by the above-named authorities, often to the detriment, directly, of the sick, and against the interest of the State. Hence you are earnestly requested to ask the Legislature to change the laws relative to the procuring medical aid to the unfortunate poor and criminals. This can easily be accomplished by enacting that bids for this practice shall not be allowed, but to enact that the electing power, who select physicians for this work, shall notify all the physicians of their county or town what the price is to

be for such work, and shall elect one of the number of those who agree to accept the published price.

FRANK ALLEN, *Chairman*,
TAYLOR HUDSON,
J. S. SAUNDERS.

To the Officers and Members of Texas State Medical Association:

It is believed that at this session you should take some action looking to the control of the issue of medical diplomas from our University; and while it is believed that it is not difficult to procure the services of Professors in Texas, perfectly competent to teach medicine and surgery, it is believed that a Board of Examiners, separate from those who teach, should examine and pass on the worthiness of applicants for medical degrees, and that this plan would not be derogating the honor or standing of the University Professors, and it is believed this Association should name the Board of Examiners, and that they should determine the length of time of study.

And that the scholastic or literary attainments of those applying for positions as students in our offices should have your consideration; and that the expression of your opinions on these subjects should at least be promulgated. In no other way could you elevate higher the standard of medicine. Recommended that such professors be appointed whose action can be relied upon.

J. W. SEARS, *Chairman*,
J. LARENDEN,
T. W. CONNERLY,

To the President and Members of Texas State Medical Association:

In our empire of territory are native plants, and herbs, and minerals, many of which by the inroads of civilization, are becoming scarce or neglected; these should be preserved or cultivated and classified, accurately described, and tested by competent authority; and it is believed that duty demands that you make suitable representation of these facts to our law-makers, and ask the setting aside a suitable portion of our vast public domain for a Botanic Garden, for the cultivation and preservation of these valuable natural resources; and, if properly located, this selected locality could be made a useful health resort, a grand Yellowstone Park, where pleasure, health and recreation could be obtained in our own borders. Coupled with this idea is that of change of climate and scenery for the sick; and as our State embraces many regions almost unexplored, scientifically, or tried as to climatic effect, these should be investigated, as it may be we have localities where the diseased, by climatic influence, may be exempt from predisposition, hereditary or acquired troubles, or their ills so mitigated as to make life bearable, or prevent suicide.

Your committee would recommend that all the ex-Presidents of the Association be made a committee, of which you should be Chairman, to investigate this question and report at some future meeting.

A. P. TALLEY, *Chairman*,
J. C. MILNER,
SAM R. BURROUGHS.

To the President and Members of Texas State Medical Association:

Your committee recommend that the following resolution be presented to this Association for adoption:

Resolved, That the Texas State Medical Association, as a body, requests the members of Congress from the State of Texas to advocate the inauguration of measures, and the necessary appropriations, to secure the publication of the United States Pharmacopœia by authority of the Government, so that we may have an authoritative standard upon the subjects usually comprised in the commonly received work of that name.

J. J. BURROUGHS, *Chairman.*

To the President and Members of the Texas State Medical Association:

Gentlemen—Your committee, to whom was referred the subject of establishing a Museum and Library, for the promotion of the science of medicine in Texas, would recommend that Dr. Ashbel Smith, President of the Honorable Board of Regents of the University of Texas, have set apart a room or rooms for the purpose under consideration, and that the members are requested to preserve valuable pathological and other appropriate specimens, and have them labeled, with name of specimen, and name of donor, and date, so that when the place to deposit same is ready they can send them and have them properly preserved for inspection of the many thousands who may, in future, visit what it is hoped will be the Medical Museum and Library of Texas.

At the present time, until the place is obtained, it is not deemed expedient to make further recommendations in regard to Library; and we would further recommend that a permanent committee of three be appointed on Museum and Library.

Respectfully submitted,

J. CUMMINGS,
J. C. LOGGINS,
S. D. THRUSTON.

Adjourned to 2 P.M.

AFTERNOON SESSION.

Association called to order at 2 P.M.

Dr. W. A. East moved that Dr. R. M. Swearingen be requested to furnish a copy of his eulogy on the life and character of Dr. T. D. Manning, for publication. Adopted.

Dr. J. Larendon reported a case of mulatto girl, 22 years of age, and mother of two children, who had four mammary glands, from all of which milk was secreted, though she nursed her children from the two larger ones.

Dr. Burt read the following to the Association:

NORMAL LIQUIDS, MADE BY PARKE, DAVIS & CO.

I beg to call the attention of the Association to this class of remedies, made by assay test. They are simply fluid extracts, made by assay, representing the active

principle of the drug, leaving out inert and extractive matter, always of uniform strength. Samples ready for distribution in the exhibit room, by Mr. Odena.

SARCO PEPTONES—RUDISCH'S EXTRACT OF PEPTONIZED BEEF.

Sarco Peptones contain not only all the extractive substances, organic and inorganic salts of the beef, but also most of its albuminous portion, converted into a soluble form known as Peptones. Samples to be had from Parke, Davis & Co.

WHEREAS, There is before this body a resolution looking to the establishment of a State Botanic Garden; therefore,

Be it resolved, That there be created by this Association a new Section, to be known as the Section on Dermatology and Medical Botany, with Chairman and Secretary, with all powers and authority of other Sections of this Association.

L. J. RUSSELL.

Adopted.

The following resolution was introduced by Dr. Cummings, and adopted:

WHEREAS, The New York State Medical Association has ignored the Code of Ethics, in one of its important provisions, so as to forfeit its representation in the American Medical Association; and

WHEREAS, Some of its leading members have united in the organization of a new Association for the State of New York, under the National Code, the principles of which are recognized by the profession of regular medicine throughout the world; therefore, be it

Resolved, That the Texas State Medical Association endorses the elevated course pursued by the gentlemen referred to, and congratulates them in severing their connection with the New York Association, and extends our best wishes in behalf of the new organization.

Adopted.

The Nominating Committee retired for work.

Section on Ophthalmology was called. Dr. Tyner read two articles from Dr. George P. Hall, Chairman of the Section. (Dr. Hall was absent, on account of injuiries received from a railroad disaster which occurred as he was on his way to Belton.)

Article entitled, "Temporary Nearsightedness caused by a Carious Molar Tooth."

Also, "Four cases of Chronic Complicated Otorrhœa."

Both articles referred to Publishing Committee.

An article by Dr. C. W. Truehart, of Galveston, "Fibroid Tumor of the Middle Ear."

An article by Dr. M. Salm, of Austin, "Some Rare Cases in My Practice."

Both referred.

Dr. R. H. Chilton, of Dallas, read an interesting article on "Organic Entropion and Distichiasis."

Dr. Tyner and others made some remarks on the article, after which it was referred.

Dr. Jas. A. Cox, of Will's Point, an article, "An Operation for Trichiasis."

Also referred.

Section on Surgery was called. Dr. W. H. Wilkes, of Waco, was called to the Chair. Dr. Q. C. Smith, of Austin, read an article, "Treatment of Fresh Open Wounds;" also presented an embryotomy shears of his invention.

Dr. T. H. Nott, of Goliad, called attention to a number of specimens he had brought along from Southwest Texas: 1. A mulberry calculus as large as a partridge egg, weighing 526 grains, removed from a young man by the medio-bilateral operation.

2. A number of hypertrophied tonsils, preserved in alcohol.

3. A vesical fibroid tumor, weighing 240 grains, removed from the bladder through the urethra.

4. A tumor, from the mouth of a man fifty years old.

5. A nest of chicken-bones, from the rectum of a child.

Dr. W. H. Brown, of Waco, reported a case where he successfully removed a large stone measuring 10½x7½ inches in circumference, and weighing 12 ounces.

Dr. M. K. Lott, of Belton, read an article, "Surgery in Cyclones, etc," which was referred.

The Committee on Nominations came in and made their report. [Report of officers elect, chairmen, secretaries, delegates, committees, time and place of next meeting, will be found in the front pages of these proceedings.]

Dr. H. C. Ghent, President elect, was then conducted to the stand and introduced by Dr. R. M. Swearingen.

Dr. Ghent thanked the Association for the honor conferred upon him in the following remarks:

Gentlemen of the Texas State Medical Association:

I thank you most cordially for the honor you have this day seen fit to bestow upon me. This is the proudest moment of all my professional life. I have no language at all adequate to give expression to my emotions and gratitude on this occasion.

In a government like ours, it has ever been considered an honor to be elevated to the highest political office within the gift of a free people, as that, for instance, of Governor of a great State like Texas, even when the office is sought; but to be tendered the highest office an association like this can confer—an association composed of gentlemen who have risen to distinction in one of the greatest and grandest professions in the world—the honor is ten-fold greater than any mere political preferment could be, however exalted. Coming, too, as this has done, unsolicited or unsought by me, and with such singular unanimity and heartiness from you, makes it peculiarly gratifying to me.

Thanking you again, from the bottom of my heart, I beg leave to assure you, gentlemen, that I shall leave nothing undone, so far as I may have the power, to elevate the standard, advance the interests and promote the usefulness of the medical profession of the proud State of Texas. I shall endeavor to so preside over the Association as not to prove entirely unworthy of the honor and the trust. But to do so successfully, I must have the hearty and earnest assistance and co-operation of the Association. This, gentlemen, I most respectfully ask of each and all in the beginning.

Dr. M. H. Oliver introduced the First Vice President, Dr. E. P. Becton, of Sulphur Springs, who responded in a happy and humorous speech.

Dr. H. H. Darr, Second Vice President, was introduced by Dr. S. D. Thruston, and Dr. M. Matkin, Third Vice President, was also introduced, and both responded in very brief but appropriate remarks.

Dr. A. P. Brown, retiring President, expressed his thanks to the Association.

Dr. E. P. Becton moved a vote of thanks be tendered Dr. A. P. Brown for the able, impartial and dignified manner in which he has presided over the sessions of the Association.

Dr. F. E. Daniel, Chairman of the Committee appointed to make recommendations on the subject of a State Board of Health, submitted the following bill, which was read and adopted:

A BILL TO CREATE AND ESTABLISH A STATE BOARD OF HEALTH IN THE STATE OF TEXAS.

Be it Enacted, By the Legislature of the State of Texas:

SECTION 1. That the Governor, with the consent of the Senate and upon the recommendation of the Texas State Medical Association, shall appoint seven practicing physicians resident in the State, who shall constitute the State Board of Health. The persons so appointed shall hold their offices for seven years; *provided*, that the terms of office of the seven first appointed shall be so arranged that the term of one shall expire on the 30th day of December of each year, and the vacancies so created, as well as all vacancies occurring otherwise, shall be filled by the Governor, with the consent of the Senate, upon the recommendation of the Texas State Medical Association; *provided*, also, that appointments made when the Senate is not in session may be confirmed at its next ensuing session.

SEC. 2. The State Board of Health shall have the general supervision of the interests of the health and life of the citizens of the State. They shall have charge of all matters pertaining to quarantine; and shall have authority to make such rules and regulations, and such sanitary investigations, as they may from time to time deem necessary, for the preservation or improvement of public health; and it shall be the duty of all police officers, sheriffs, constables and all other officers and employes of the State, to enforce such rules and regulations, so far as the efficiency and success of the Board may depend upon their official co-operation.

SEC. 3. The Board of Health shall have supervision of the State system of registration of births and deaths as hereinafter provided; they shall make up such forms and recommend such legislation as shall be deemed necessary for the thorough registration of vital and mortuary statistics throughout the State. The Secretary of the Board shall be the superintendent of such registration. The clerical duties and the safe-keeping of the bureau of vital statistics thus created shall be provided by the Secretary of State.

SEC. 4. It shall be the duty of all physicians and accoucheurs in this State to register their names and postoffice address with the District Clerk of the district where they reside; and said physicians and accoucheurs shall be required, under penalty of ten dollars, to be recovered in any court of competent jurisdiction in the State, at suit of the District Clerk, to report to the District Clerk within thirty days from date of their occurrence, all births and deaths which may come under their supervision, with a certificate of the cause of death, so far as to them known, and such correlative facts as the Board may require, in the blank forms furnished as hereinafter provided.

SEC. 5. Where any birth or death shall take place, no physician or accoucheur being in attendance, the same shall be reported to the District Clerk within——days from the date of [its] occurrence, with the supposed cause of death, by the parent, or if none, by the nearest of kin, not a minor, or if none, by the resident householder where the death shall occur, under penalty as provided in the preceding section of this act.

SEC. 6. The coroners of the several counties shall be required to report to the District Clerk all cases of death which may come under their supervision, with the

cause and mode of death, so far as can be ascertained, etc., as per forms furnished, under penalty as provided in section four (4) of this act.

SEC. 7. All amounts recovered under the penalties herein provided shall be appropriated to a special fund for the carrying out of the object of this law.

SEC. 8. The District Clerks of the several counties in the State shall be required to keep separate books for the registration of the names and postoffice address of physicians and accoucheurs, for births, for marriages and for deaths; said books shall always be open to inspection without fee; and said District Clerks shall be required to render a full and complete report of all births, marriages and deaths to the Secretary of the Board of Health, annually, and at such other times as the Board may direct.

SEC. 9. It shall be the duty of the Board of Health to prepare such forms for the record of births, marriages and deaths as they may deem proper; the said forms to be furnished by the Secretary of said Board to the District Clerks of the several counties, whose duty it shall be to furnish them to such persons as are herein required to make reports.

SEC. 10. The first meeting of the Board shall be within fifteen days after their appointment, and thereafter in January and June of each year, and at such other times as the Board shall deem expedient. The meeting in January of each year shall be in Austin. A majority shall constitute a quorum. They shall choose one of their number to be President, and they may adopt rules and by-laws for their government, subject to the provisions of this act.

SEC. 11. The President shall serve for two years, or until his successor is elected. He shall be ex-officio Health Officer of the State, and shall perform the duties of that office as now provided for by law, and shall receive the same compensation, and it shall be paid in the same manner as is now prescribed by law.

SEC. 12. The Board shall elect a Secretary, whose term of office may be fixed by them. He shall superintend the registration in the Bureau of Vital and Mortuary Statistics, and shall perform all the other duties prescribed by the Board; and in addition thereto he shall perform such duties as are specified in a bill of even date entitled "An act to regulate the practice of medicine in the State of Texas," and shall co-operate with the several Boards of Censors in executing the provisions of said bill, for which latter services he shall receive the compensation provided for in the said bill; and in addition thereto, for and in consideration of the performance of the first mentioned duties, he shall by this act receive a salary which shall be fixed by the Board. He shall also receive his traveling and other expenses incurred in the performance of his official duties. The other members of the Board shall receive no compensation for their services, but their traveling and other expenses, while employed on business of the Board, shall be paid. The President of the Board shall quarterly certify the amount due the Secretary, and on presentation of his certificate, the Auditor of State shall draw his warrant on the Treasurer for the amount.

SEC. 13. It shall be the duty of the Board of Health to make an annual report, through their Secretary or otherwise, in writing, to the Governor of this State, on or before the first day of January of each year, and such report shall include so much of the proceedings of the Board, and such information concerning vital statistics; such

knowledge respecting diseases, and such instruction on the subject of hygiene, as may be thought useful by the Board for dissemination among the people, with such suggestions as to legislative action as they may deem necessary.

SEC. 14. The sum of five thousand dollars ($5,000) or so much thereof as may be necessary, is hereby appropriated to pay the salary of the Secretary, meet the contingent expenses of the office of the Secretary, and the expenses of the Board, and all costs for printing, which, together, shall not exceed the sum hereby appropriated; said expenses shall be certified and paid in the same manner as the salary of the Secretary.

SEC. 15. The Secretary of State shall provide rooms suitable for the meetings of the Board, and office room for the Secretary.

SEC. 16. This act shall take effect and be in force from and after its passage, and all laws in conflict with the same are hereby repealed.

The above bill was referred to the Legislative Committee, with the request to ask its passage by the next Legislature.

Adjourned to 8 a. m. to-morrow.

MORNING SESSION.

April, 25, 1884.

Association was called to order by Dr. H. C. Ghent, President.

Minutes read and approved.

The following papers were read by caption and referred to Committee on Publication:

Dr. J. S. Sanders, Blood-letting.

Dr. J. A. Gibson, Sulphate of Magnesia as a Cholagogue.

Dr. J. C. B Renfro, Typho-malarial Fever.

Dr. R. G. Williams, Prolonged Vomiting.

Dr. T. H. Nott, Tait's Operation.

Dr. Stallcup, Labor in a Girl 11 Years Old.

Several other papers in the different sections were referred to the Committee on Publication.

Dr. T. H. Nott read a memorial letter in reference to Dr. J. Marion Sims, and made quite a eulogistic speech in reference to his life and work.

Dr. W. J. Burt offered a resolution appropriating $100 to the Sims memorial fund, which passed unanimously.

A resolution of thanks was presented by Dr. W. J. Burt to the following firms for their exhibitions before the Association. Carried:

The Wm. S. Merrell Chemical Company, of Cincinnati, Ohio, fine chemicals, fluid hydrastis, fluid extract from green plants. Represented by Mr. Henry Capleston.

J. P. Alban & Co., Memphis, Tenn., full line surgical instruments and appliances. Represented by C. W. Alban.

J. H. Chambers & Co., of St. Louis and Atlanta, Ga., publishers and dealers in medical books. Represented by Dr. J. W. Lanius.

Dr. Geo. T. Atkins, of Dallas, Tex., full line of surgical instruments and appliances of all makes. Represented by Geo. T. Atkins.

Dr. W. S. Richey, of Chicago, full line exhibit of artificial dentures. Exhibited by Dr. F. S. Lockwood.

W. H. Schieffelin & Co., of New York, line of soluble pills and granules, oleates. Represented by J. W. George.

Parke, Davis & Co., of Detroit, Mich., rare crude drugs, pills, chemicals, fluid extracts, elastic capsules, oleates, eff. gran. salts, sarco peptones, urinary test papers, concentrations. Represented by Fred. M. Odena.

The following resolution was adopted:

WHEREAS, Drs. Daniel & Brooks, members of this Association, have, actuated by a worthy and noble zeal in the cause of medicine, established, by their individual efforts, and under circumstances of a most difficult and discouraging nature, a medical organ of a high order of merit, a fit representative and exponent of rational medicine, which we hail with delight as a standard around which we can and will rally, and, by God's help, advance to the front in the battle for our rights in the march of sanitary and scientific progress,

Resolved, That in the Texas Courier-Record of Medicine, edited and published by Drs. Daniel & Brooks, we recognize a journal of first-class ability and high moral tone, whose teachings, based on an acceptance of, and a profound reverence for, the National Code of Ethics, advocate a higher code of morals, a higher standard of education, and unity, harmony and concord in professional ranks.

Resolved, That we individually endorse the Courier-Record, and promise our support.

The following resolution was offered by Dr. F. E. Daniel, of Fort Worth, and unanimously adopted:

WHEREAS, The good people of the loveliest village of the plain have, without regard to condition or sect, thrown open the hospitable doors of their peaceful homes to the delegates of the Texas State Medical Association, and have given us the warmest and most cordial welcome, making us to feel literally at home, and have been

indefatigable in their efforts to put us upon a footing of perfect ease and comfort, contributing in every way to the pleasure of our stay, to which end they have succeeded in a most thorough and satisfactory manner,

Resolved, That we hereby give expression to the general sentiment animating the convention, which is one of most grateful and heartfelt appreciation, both of these efforts and of the princely hospitality which we have most thoroughly enjoyed; and so long as the vital principle animates our bodies we will cherish the kindest and most pleasing memories of our visit, and of those new found friends who have already taken possession of our hearts, and who will ever occupy a warm place in our affections.

Resolved, That the thanks of this Association be and are hereby tendered to the entire citizenship of Belton—and especially and particularly to the ladies—God bless them—and to the reverend gentlemen of the religious denominations, who have contributed more than their share to our entertainment.

The following, by Dr. W. J. Burt, was also unanimously adopted:

Resolved. That the thanks of this Asssociation be tendered the reporters of the Fort Worth Gazette, Houston Post, Austin Statesman, San Antonio Express and Belton Journal for their full and fair reports of the proceedings of the Association.

A motion to adjourn was then made and carried, and the President, Dr. H. C. Ghent, declared the Association adjourned to meet in Houston, Texas, on the 3d Tuesday in April, 1885.

W. J. BURT, M. D.,
Secretary Texas State Medical Association.

THE PRESIDENT'S ANNUAL ADDRESS.

DR. A. P. BROWN, JEFFERSON, TEXAS.

Gentlemen of the Texas State Medical Association:

The purposes of our Association are to modestly exhibit to you, in some way, the ability in our profession and the heart-felt interest we take in it; to show to you we are not unmindful of your best interests, the preservation of your health, and that we do strive to be worthy of the trust you so generously impose in us; and to better prepare ourselves to fully warrant your confidence and to extend the bounds of legitimate practice, and encourage and advise our law makers in the enactment of measures looking to the general good of the State; to learn and grow wise from the scientific attainments and practical truths gathered from the rich experience of those we meet at these annual convocations, and to impart each his learning to his fellow; compare experiences, the ripe results of which, will make us wise, practical, and of use to our fellow man, ourselves, and families, and enable us to pass the watchwords, here learned, far on down the lines to a posterity which we trust, becoming enriched by our experience, may further enrich and profitably benefit generations yet unborn.

"And through all future time,
Each grand achievement touches the sublime;
Within each field of learned labor lies,
For all who will contest, a fitting prize;
The higher flight demands the higher aim,—
'Tis only those that catch the heavenly flame."

He who for long years of toilsome labor shows the silver lock, the bending form and tottering step is yet a learner. Not satisfied with the experience of others, he yet reaches out into uncultivated fields, if perchance, he may find something that will add to his proficiency. And, often finding closely observed fact of more profit that speculative rea-

soning, or prescribed rules by old authors, he brings these to us, in person or by representative, through onr established sections, or records them in some of our medical journals. Others seeing this record, compares it with their own, and, if of investigating mind rather than opposing disposition, become the gainers. Thus while our science is not an exact one it is one of the most exacting. From the date of matriculation to the close of our professional lives we are necessarily learners, and, if true to that profession, teachers as well as learners. Yet with all this study, investigation and labor—with the accumulation of thousands of years—there are many things in our profession which, like the promised land to Moses, we can see but not possess; for, far back in these ages measles, scarlet-fever and whoopingcough, were often as successfuly treated as in our present enlightened age. Many observers have attempted to determine the entity or producing cause of these, and many other well known and distinctly described troubles, and failed. Although yet on the border-land, we believe we soon will possess this coveted prize, and, as good pilots, steer the crafts, containing these ills, to a harbor of safety. Yet disappointment will come to all, and how to meet these casualities, sometimes blessings, will often tax even an inventive genius. No wavering or turning back is permitted. All must die. Change is written on the face of nature. No chemist's art has yet elaborated a panacea. The fountain of youth is yet beyond the horizon, and it is best for us that it is so, or else the knowledge of unpossessed facts would stay investigation, stagnate the brain, or remove the incentive to acquire greatness, or to do good. And to us might come the fate of Egypt's sages who, in lassitude begat of surrounding comforts and the enervating tendencies of her semi-tropical clime, stood still, then retrograded, then in abject poverty of mind and soul occupied stations intellectually inferior to some to whom, in her palmy days, she had been the bright encouraging exemplar. This being an acknowledged fact it is our duty yet to labor that we may eliminate the pretended and establish the true.

It is related that the eminent artist, Griotto, painted a portrait of Dante in fresco on the walls of Bargello palace, in Florence, where for five hundread years it had remained hidden by a coat of white wash. Something like the finding of this ancient piece of art comes up to us in some of our investigations here. The rust of ages is scraped away. "Iron sharpens iron," and many a grand idea is given with as much freshness as in its originality. Hidden things are not always lost (and

we hope this is one of those occasions.) They are actually preserved by being hidden, and their revelation often comes at a most opportune moment. In the lonely chambers of the soul, many a wall is illumined with the fresco of a grand remembrance, lost for the time to all but its possessor. It is covered over with other thoughts and other cares. To erase this cover and bring to light the pent up knowledge in the brains of the solid thinkers of this empire State is our mission here, and we believe the covering from many frescoes are drawn aside at these meetings to be utilized and bear fruit, to the attentive observer of the word pictures here framed and hung out to view, for by our nomadic life we meet the owners of these frescoes, thereby mutually enjoy what might otherwise be lost, or forever remain hidden. A retrospect to the first origin of our profession reveals the touch of master hands and hearts, and minds alive with tender solicitude for the suffering. And, often as we read and compare the past and the present, we are astonished and full of wonder that such minds could come as near the solution of facts as we, and yet, for so long a time, remain away, or not be in possession of accomplished facts to many mediocres now well known. The day is not far distant, judging from the rapid strides of the last half century, when positive truths and settled facts, in our science, will reach so near universal adoption as to place inferiority at a discount everywhere. The student fresh from the halls of our university will be fully equal to many of those who by long years of study and active practice now occupy high positions. This is the ultimatum we desire.

Experience is primarily a rude teacher, but a splendid expedient, and lessons learned in her school are oft ineffaceable, and very profitable. The cries of agony from illy-narcotized patients, when boiling tar was applied to an amputated limb, touched the great heart of Ambrose Pare, and a ligature for the divided blood-vessel was the result of his study and experience, to avert danger and mitigate pain. Yet, even in this day, we hear learned professors decry this procedure of which their knowledge is the result. The true effects of medicines are thus only known. Empiricism can be intelligent, and should be encouraged. Some inventive genius is yet to perfect an apparatus to counteract Quinine deafness, or find some antidote, perhaps on the banks of our paludal streams. No school suggested to McDowell to dare and do the grand operation by which thousands of lovely women now live to bless his memory. The schools of his day cautioned against such

procedure. The day in that epoch had arrived for some vast forward move, and the steady hand and master mind of the Kentuckian was equal to the occasion. The idea of liberating parenchymatous pus with Walter, Roser, Simon and Stone, by their peculiar method, to each of them was new, but none the less valuable because of the experiment, but of the intelligent kind, that bore the fruits of a noble purpose. Of these, so of many more, all along down the ages—each one bearing its fruit. In each is shown some grand discovery by which the healing art is benefited and advanced, and no doubt in many a bosom is locked some valuable fact fearing to announce lest Epiricism should be charged.

As far back as we have any knowledge of medical schools and associations the members of these, have at times, not agreed often on vital points. Professional schism has even prevailed, and has often wrought injury, sometimes good. There are many things about which the most learned of our profession honestly differ, and the better will it be when we accept this inevitable fact, and do away with questions of casuistry or cease to engage in debates of polemical character. Yet men will differ in all the affairs of life, and even of the hereafter. We are but mortal, and too much should not be expected of us. One mind is trained in one channel of thought—another differently. By clash of arms the strength or weakness of a fort is tried. A West Point and Annapolis man laughed at the sand embankment of a heathen, though they soon unlearned, by dear experience, the fierce teachings of the grandest military schools on earth. All of us have not exactly the same oral teachings. This would engender difference of belief, or a divergent belief might result from the manner of interpreting the didactic teachings of the same author. The University of New York teaches that yellow fever is of spontaneous origin on our gulf, while the University of Louisiana takes the opposite position. When out of such variance we can establish the truth, science is advanced and the interests of our fellow-man benefited. It would seem rather desirable that a difference should exist in our minds that investigation should be pushed with a thoroughness that will eliminate all error, and place us on a solid base of truth. But for disputes of this nature Charlemaigne might not have established his new school of medicine, almost the first, out of which grew a desire for the teaching and spread of truth rather than the Benedecine hoarding of medical learning. In matters of church or state how many of you agree? Some believe in the infallibility of their family physician,

some in amulets and charms, some in the King's touch. All these fail, and when the question of who is to decide when doctors disagree, is answered, that in the majority of instances this difference is not so much in its fact, as the idea of what path shall be taken to approach the fact.

> "The chain of circumstances, with fetters bind
> Too oft the best endeavors of the mind.
> We seek a remedy for human ill,
> Where neither pharmacist's nor doctor's skill
> Finds the elixir that can stay the drain
> Of wasted energy of nerve and brain.
> Unfortunate surroundings it may be,
> Or some harsh discord in the family,
> The lesson of experience, as taught
> In country practice dearly bought;
> What wonder if we often fail to please
> Ourselves, or bring to others strength and ease?"

Captious or peevish difference generally meets from an appreciative and intelligent patient the rebuke it deserves.

It sometimes occurs that obstinate persons, or those afflicted with the "Imp of the Perverse," refuse to accept and follow knowledge clearly of general acceptation. A Roman Consul disdaining to learn the classic language of a conquered people exhibits less pride in ignorance than these. Characters of this kind sometimes gain access to our Association, and as some similars give no luster to our achievements, but rather retard a healthy growth of knowledge, for there is no one but in some degree is an example to others. These have their mission and destiny, and are tolerated because of the average charity of the human heart. By persuasive blandishments they engender the confidence of the unwary, and even, "like Marius musing 'mid the ruins of Carthage," take pleasure in the desolation they have wrought. Heaven spare the sick from gifted ignorance! Our German friends paraphrase these characters, "Doctor fuer eie Gesunder und Gott will helpen den kraunken." And let us hope for the judgment of a Rhadamanthus, with the furies Alecton and Megara, to scourge these from our temple. To many, a plea for our profession is not necessary, that due consideration be awarded to the true and just. Yet, the tares and wheat oft grow together, and while the survival of the fittest is not predicted of us (nor does nature in her wise compensation always afford relief), we are compelled to ask a just discrimination that we be not judged amiss.

True greatness and inherant goodness, when not overbalanced by extreme modesty, always asserts itself, and inferiority soon "wears out."

All beginnings of important discoveries have a wonderful influence on subsequent investigation. It is pleasant to sit on the banks of some mighty river and, with mental idealization, meander that stream to its source—meeting here and there a confluence, the combined union of which makes a grand, irrepressible river. And, so it is a pleasing, and oft profitable, task to look back through by-gone ages and contemplate the characters most prominent in the different eras of our profession; to trace the peculiarities and now well understood mission of each, for every era is indellibly marked with the doings and teachings of some master mind, whose individuality is marked on his epoch. Stephenson's memory rises before us equally as we look on the toy moter or the Corlis engine. So we remember, with pride, the name of the patient botanist, who gave us a soothing balm of alkaloid, as well as he whose inventive genius constructed the opthalmoscope or lithorite. From the very earliest efforts at the application of medicine and remedies to the cure of disease, with Pagan or Christian, the physician has been held in high esteem; and it did not require a Fennimore Cooper to tell the early physicians of these beautiful prairies in what esteem the "medicine man" was held. Hippocrates was held in such high esteem among the Greeks that they sought to deify him. The Emperor Marcus Aurelius held the immortal Galen in such respect that he lavished many valuable gifts upon him, and desired that he should be the companion of his travels. And but recently, a modern Rothschild, of this State paid similar tribute to an honored fellow of this Association. These master minds who preceded us climbed from a dead sea level of darkness, superstition and ignorance to the mountain peaks of light and strength—thus giving their successors a high point of departure in every subsequent investigation. Their hard-earned goal is our starting point. We are very high because our predecessors climbed. What they achieved by much labor and thought we enjoy as a common heritage. Like dwellers on the plateau of some broad mountain, we are unconscious of our elevated position until we approach a clift and look down the canyon. So too, approach the elevated characters of the past and we see the depths out of which they raise themselves and us. No doubt the alluring light of some temporary success caused them and us to believe perfection well nigh attained. Old Time's keen scythe swings on, and the harvest yet is ripe. No hand of man has yet stayed old

ocean's wave, no structure can defy the cyclones sweep, no panacea nor close shut lattice can bar out the swift-winged messenger, Death. "It is appointed unto man once to die." Appreciating these facts, we apply ourselves to the ever-living present, for the best things are the nearest,—light in the eye, air in the lungs, flowers at your feet, duties at your hands. Then, while yet reaching out for higher attainments, grasp not at the stars but do your work as it comes certain that the ever-living present is for our enjoyment. The beautiful rainbow sitting on the wings of a retreating storm-cloud, whose awful shadows and flappings have been engulfing and shaking the earth, or the first sunburst through the dark curtains of a tempest, makes a stronger impression on the mind than the clear shining of the sun after days of calm. So with us many a brilliant metoric genius whose every word or touch lights up some hidden recess, or clears up some before undispelled darkness, for a while will dazzle us by the thought of his success. These are succeeded by a far more numerous class whose steady light, though less brilliant—and even ways and quiet lives are as useful as the former—arduous students deep thinkers.

> " Attentive listeners while others teach,
> Whose mission is to practice, not to preach,
> The privates in our noble army band,—
> The country doctors scattered through the land,
> Bear the knapsack, catch the fiercest fire."

To the household they are invaluable, moving silently and with quiet dignity, born of honest, anxious toil; heroes of a thousand unsung successes. At home as much with the simple fever portrayed on the baby's dimpled dreaming face as when clonic spasms rend the strong man, or eclampsia cyclone sweeps o'er woman's frame.

The statesman in a nation's senate, hurling a Phillipic against a Cataline, or the daring commander of conquering heroes scaling a besieged cities' walls and proudly waving his country's flag and glittering sword in the faces of an enemy, receiving their well-earned plaudits from a grateful and admiring people, feels not more pride of true greatness than does many an equally deserving modest hero at the bedside, who by some *coup d' etat,* some daring charge against intrenched disease, routs, scatters and conquers some fell destroyer. Oft for the time the brilliant achievement of one appears to greater advantage than the other, but the former is coupled with polemic unpleasantness, or war,

death, and desolation, the orphans' cries and widows' tears; the latter with peace, life, and smiles of love, where loving hearts are commanders. In our profession, of all others, are to be found the grandest ideals of a true heroism. A Napoleon at "the head of the army" or Marshal Ney's plume waving in the thickest fight is to be admired. Close by their side the army surgeon did his whole duty. The mighty roar of terrific cannon at Valley Forge, Chalmette and Shiloh, and the hissing minnie balls at Vicksburg, dealing carnage on every side and making imperishable renown for gallant soldiers, daunts not the surgeons there, but with minds and hearts attuned for such occasions, right royally did they keep a "steady front." None of us can ever forget, but will remember with pride in our profession that self-sacrificing noblemen, by nature, our lost and lamented Manning, who on the altar of mercy and charity for the good of his fellow man freely offered up his young life. And I see before me now, and would do them honor in my humble way, many of similar natures and true nobility of soul, who have periled their lives and put aside for awhile the comforts of home in the interest of their fellow man. But recently that grand man, Pasteur, called for volunteers to go to that ancient home of literature and art, where cholera was sweeping the land of the Pharos. Never yet has a similar call been unheeded by soldiers of our rank, and with a Spartan valor bred of the teachings of a noble school young Thuilet, accepted the call which was but to fall as heroes die. And his name is written high up in the pyramids and in the hearts of the children of the Nile, and as the dark-eyed Egyptian maiden, at each recurring anniversary of that noble death, places her feathery palm wreath on the gentle strangers tomb and waters his grave with her tears, she touches a sympathetic chord which by its electric impulse vibrates in loving hearts, e'en in distant Belton. Heroic Lieut. Rhodes plunging into the mad Atlantic and swiming to the rescue of perishing people on a wrecked Columbus stirs the philanthropist's heart, while on her deck briskly works the ship surgeon preparing restoratives for exhuasted men and women. A grand old conquered hero retiring from Appomattox lives in the hearts of an appreciative people. His next door neighbor was the professor, yet in his life's labor ministering to the shattered frames and loved ones in a desolate land. And we are oft accused of the want of sympathy, even by the objects of our most tender solicitude. The genuineness of this sentiment is not always expressed by the cry of alarm or the visible tear. The injustice of such expressions has bruised and crushed many

a noble heart whose every pulsation, perhaps neath a rugged exterior, was in full sympathy with an object on whom we dare not at the time give even the appearance of our true feelings. And in her twin sister, charity, none go so far as the members of our profession. Yet what the world calls greatness is attained by only the favored few. In our profession the occasion is offered to all to become great in some measure. The gentle, soothing voice to a frightened child, a sweet smile and laughing eye, from which fall soft sunbeams, or the soft touch to the nervous, fevered brow, photographs an imperishable picture of the face and form of he who gives such tenderness ; and oft from the storehouse of memory are awakened pleasant recollections of the donor. Even some necessary duty, kindly performed, adds greatness in the eyes of an appreciative patient. As Professor Cabell filling any or all the chairs in a medical school, or like Napoleon almost in a breath dictating to his secretaries in every department of state, are many of ours equally as gifted, who can exercise all their professional duties, speed the plow and railway ; talk theology, issue bills of exchange, or hold a senate spellbound with admiration, or, even in death, haunt and check an insolent government leader of the German Reichstag.

While it is pleasant to recount the noble deeds of the sons of Æsculapias it is far more pleasant to say something in praise of our gentle sisters, the heroines in our ranks. I would feel remiss in a chivalric duty did I fail to note their share in our work, and I am proud to record some encouraging word to her aspirations, and advocate her claims to a just and proper place in our ranks ; for since the historic efforts of a Hygea, and of her loving sister Panacea, were given to the relief of suffering humanity, many noble names have swollen the list of those who by fortuitous circumstances or by peculiar inheritance, or special inclination, have proven to the world that woman can be true and great, even in the arduous duties incident to medical and surgical life, and not unsex herself. Tortula and Eros died not with the fall of the Roman empire ; for their skill, as recorded in many valuable contributions to our literature, are yet in existence. Ladies of ample wealth have always patronized our science, and often materially aided in the establishment of colleges, hospitals and training schools, and many have given their time and talents, with credit. directly to our profession. Many a suffering soldiers' face has lit up with joy at the approach of a Florence Nightingale, and at her gentle presence pain has become endurable. The name of Madame Jacobi is a household word in many a family of

the metropolis. To the Princess of Anjou is due the credit of establishing the first organized hospital. A lady of that proud old Puritan stock gave us the first Board of Health. In several countries, notably the land of Confucius, none but female physicians are allowed to attend the sick of their sex; and while there is no imperative need for female physicians in a christian country, yet their claims to a proper rank and a just appreciation of their skill should not be ignored.

EVOLUTION.

Strange as it may appear, there are those who say they honestly believe and actually attempt to teach, that man is a descendant of, or has ascended from a lower organism, and that through long ages of gradual progress to a higher type of development, has thrown off his original form and substance, and out of and through these changes, a perfect man was formed. Verily the monkey and the baboon, because of some similarity of anatomical structure to ours, are proclaimed our ancestors; and it is well that our association does not hold itself responsible for the opinions or declarations of its individual members, but grants absolute freeness of thought and expression, and opposes only when unphilosophical propositions run riot. Many ideas fraught with absurdity find expression in as learned bodies as ours, and it would appear a part of our duty in some measure to disabuse the minds of the people as to the acceptation of such illogical propositions by our profession generally. Materialism has wrought its frightful work in the minds of many, and spread its contaminations with its expressions. The larger number of our profession hold and teach man was created in the image of his Maker, full and complete in all the anatomical structure as we are to-day, and for all the past centuries have known our race to be, and no such divine formation nor great destiny was ever recorded or predicted of any lower organism.

To simply assert the positive fact on the one side, coupled with a denial on the other, is not sufficient for our purpose here. The ever restless mind reaches out for the reason in this all important matter, and to turn the entire machinery of our active minds to the contemplation and study of ourselves is as reasonable as to minutely inquire into any ordinary business matter of life. What man was in the past and what he is to-day intellectually, morally and physically, is a grand study, and we are compelled to consider what our ancestors were and what we are to-day, to arrive at any reasonable conjecture of what we

are to become. It is a well observed fact that nature never repeats herself. In all created things no two are exactly alike, though similar degrees of difference, if not to the unaided senses, are observed, yet a more minute or aided observation readily detects these differences. And, so equally true it is, no two intellects being exactly alike, some variety of thought is evident in all our search for truth; and, as minds and modes of thought vary in degree, so too, large difference might naturally be expected to result from similar investigation, even from those of apparent similar natures and both of sound mind. Truth is eternal, and no matter how wide the divergence of opinion and expression thereof, the premise being correctly taken, this ever-living principle, truth, will triumph. Our minds are of the most delicate construction indeed, and it becomes a very interesting study to contemplate and analyze its results, to observe the electric flash of one or the steady observations and tardy acuteness of another taking form and developing into mature fruit. How grand the knowledge that no idea or thought is ever lost, and that no mind is ever full. Do we observe anything in the lower order of animal life even approximating man in this respect? In the unaltered specific peculiarities in all organized bodies—man does not partake of any, of which we know, by which we can infer evolution, as entertained by some. Can we conceive how, for ages of recorded observation, if evolution occurs, that no perceptible change has occurred in the physical structure of all organism whence the evolutionist would make us rise. Can a fair comparison of our knowledge of these enable us to deduce such facts? Yet, we are in honor impelled, as scientist and searchers after truth, if not in courtesy, to examine all these theories—all this manner of reasoning, all this philosophy of mind, by which some philosophers attempt to prove man to be of this humble origin, and rising to a higher sphere—a more perfect organism. Materialism and psychology cannot thus blend. Is man's greatest destiny here on earth? Is there no beatific beyond out to which the mind is to reach? An intuitive intelligence would even warrant such aspiration, but the philosophers of this school of evolutionist attempt a solution of this problem by natural selection, and, as if to satiate our longings, array for inspection and observation many facts in natural history. These, of themselves, are valuable as facts, but when compiled for this theory, absolutely prove no fact in man's early existence that points to this selection. Earth, and all it contains, is made to contribute her quota of evidence to substantiate

these theories. The rude implements of "The Stone Age" are brought in evidence to prove the infancy of the mind. At that time Brittons, perfect in anatomical structure, dressed in skins of wild animals, which were, long years after, Israel's regal power, before Abraham was IAM.

Anthropologists tell us the minds of some tribes of men run in such channels that it is almost impossible to divert them, for any length of time, as the tribes of American Indians in the heart of New York, who for long years have been surrounded by all the arts and sciences peculiar to an American Anglo-Saxon civilization. Their neighbors, the Ontarios, who, almost in primitive simplicity, dress as originally and feed on the same food, prepared in the same rude vessels of two hundred years ago, with all the enlightenment and civilization of two centuries, like their Niagara, daily pouring before them—with over a century of government care and watchful attention—they have not evolved. That the Bushman, of remarkable low stature, lives near by that perfect piece of anatomy, the Zulu, is not an evidence that the latter was ever as the former. The African, because of his imitative nature, and while associating with his white brother, readily assimilates, adopts his customs and ways, but lapses into semi-barbarianism, with all her feticism, when the restraint of the higher civilization is withdrawn. The mongrel partakes most of the nature of the inferior parent; the Mulatto delights most in the ways of the African; the mule will show his stubborn ancestry; "the leopard cannot change his spots." How strange that intelligent men should ask our reason to sanction the opposite of these facts, and declare full satisfaction of such illogical conclusions? We protest the acceptance of a genealogy so inferior. How would your sense of propriety be shocked if you were asked to believe at some future day, when some of this inferiority might crop out, your children should receive something like the following: "Mr. and Mrs. Mollusca De Smith, of Oyster Bay, request the pleasure of your company at the marriage of their daughter, Miss Arrabella Bivalve, to Col. Jacobus Baboni, of Congo Square." No! no! the De Smith family is too respectable for such descent. Not while the Pyramids stand can we accept the stone-age theory, for scientists have successfully proven that these Pyramids, in every angle, stone and all their internal and external structure, are full of wisdom, and was reared as a perpetual reminder of scientific and religious truths. A negative of idea that inferiority existed in the anatomy of their builders, but rather asserting, as the Greeks and Romans believed, they had descended from the Gods.

Heroditus, the father of history, the first to record the existence of this yet unequaled piece of history and engineering skill, says: "How it came there at so early a period of the world's history, and for what purpose, has been one of the standing questions of the ages." This evidence from an authority whose close research and patient investigation of historic events is of more weight, and *prima facie* is sufficient to have us reject such evidence as point to these small stones—the "arrow-heads of Chalcedony," chiseled by some Hiawatha. The Mummy's silent answer to evolution is refutation itself, for the preservative qualities of these ancient preparations to-day defy the chemist's art. Does it appear the part of true wisdom to assert that the minds that devised and the hands that executed these evidences of a perfect man, long existing, and these mighty piles of masonry, in such perfect mechanical construction as to defy the competition of this enlightened age, were the work of men whose minds were in their infancy? Indeed, no; they were æschynites in chemistry, but perfect in anatomy. The honey bee, since first record, builds his home with the same geometric precision; the sweet singer weaves her nest—the counterpart of those in Eden, and the monkey lives in holes and among the branches of the trees, while man, by the cultivation of his mind, and not anatomy, daily rises higher.

Art and science, we know, have had their waves, which have thrown upon the shores of time vast records of the past. The brass tablets and granite monuments, inscribed with the labors of the artisan, unfold to us histories of cities long buried from sight. In the temple of Æsculapius these mementoes are of unknown date, yet the same as those of our metropolis. Recent discoveries in Asiatic countries record a great proficiency with her people in ancient times.

The recondite and esoteric hieroglyphics of the Toltees, the precursors of the cultivated Aztec, left a record of surpassing greatness. Mexico adds her quota to this record, for her astromically constructed pieces of ancient architecture, of which the early history is lost is an unremembered, unrecorded past, testify to the learning of the people of that day, and record their doings, the finished work of minds matured. And, even in our land, evidences of a high degree of culture are found to have existed in a people of whom we have no record.

Even the Comanche has no tradition of when the Mastodon was alive, whose skeletons are thick about Dallas. Their structure, and the sea-shells and shark skeletons, found in close proximity, are the same as

those found in other countries—both dead and alive—and no evoluted monstrosity. No Cardiff Giant nor Lilliputian skeleton are there to attest the co-existence of man at that time or place.

What existed before the barbaric races of the North crushed out Roman civilization, is in part conjecture, but sufficiently accurate to establish a high culture for those long lost people. And, though a long gloomy darkness succeeded this conquest and held down the attainments to a higher cultivation of natural functions, there is sufficient evidence that these men dominated the inferior animals and were no part of their anatomy.

That cultivated intelligence is only the higher order of instinct, is the theory of this "would be" science, and that man is the product of progressive natural selection. This is asking this same intelligence to dwarf itself to accomplish this ideality, and to believe that all the knowledge and intelligence we possess is cultivated instinct of lower animals. This is asking us to retrograde in our pride of ancestry. Nature, in all her laws, is perfect. Uncertainty does not exist, or mark, or mar, a part of her machinery. It is a well established pathological fact that hereditary diseases reappear even to the tenth generation. Then would it not be expected that somewhere in all this long line of ancestry that the inferior anatomical peculiarities of this lower oganism, out of which man is conjectured to have arisen, would have reappeared? This has not occurred. The Semitic tribes, the Latin race, the Anglo-Saxon, the Britton, the Negro, and Indian, by and through all history or tradition, were of the same anatomy ab origine.

Chemistry teaches that no substance is ever lost, but exists in changed conditions, always of original elementary parts. Nature in herself shows a well-defined, unchanging purpose for everything. None of her works are for vain show. Each has its mission and destiny. Believing this, where, I ask this school of philosophy, are the minds of those millions of beautiful, symmetrically formed children who cut off in all the months of infancy, and whose sparkling eyes and changing expressions of face point to senses well-formed, and of original perfection? Does it enter into the minds and hearts of man to entertain the idea of future nothingness, for those uneducated minds? Or is it not rather more natural to believe there is a sphere more friendly to the perfect development than this of ours, where these young minds and senses are trained higher, and not by contact with inferiority? It does

clearly appear to us that these recorded facts more clearly contradict evolution and natural selection than testimony remotely leading to such hypotheses.

Communities have a right to demand that the standard of their physician shall be very high, for, by his avocation, he is brought into the most intimate relations of the family home. And, on the other hand, the degree of respect should not be grudgingly withheld. The motive which impels respect and honor for great learning and assiduous toil, coupled with the divine attribute, charity, we know is not the only one that incites this respect. Granting that it is the selfish motive of relief from pain, it is none the less sincere. The king and peasant all give honor to the physician, each according to his capacity. And is it not due? For how many even now before me might have been frightfully marked, cruelly maimed, or stricken in death, but for this grand corps, who so oft have turned the tide of pestilence from you homes—suffering all exposure for humanity's sake. And, if we appear to boast, we feel that we have an appreciative audience whose regal hospitality would evince no neglect of duty to the most humble of our profession.

Many often blame us for yet writing our prescriptions in a dead language. While this, to the unreflecting mind, may be some ground of exception, by a more careful study and examination of this ancient custom it will readily recommend itself. When we remember that many are of peculiar education, and have such preconceived ideas that they associate many diseases with the medicines proposed to be administered, and if our prescriptions for these are written in the plain dialect of the patient, his fears or apprehensions would be aroused, or perhaps be stimulated by a nervous, fretful imagination to such an extent as to frustrate our purpose, or cause them to utterly neglect our directions. Our formula language is almost of universal use, and although dead, speaks eloquently from many thousand prescription stands daily.

The imprudent clamor in this utilitarian age for everything that is cheap extends even to our profession, and is full of danger to the sick. Sensitive physicians are troubled to decide, even in the discharge of known conscientious duties, when a parsimonious patron is wearing out lives too precious to be dispensed with.

From the land of the son of Lagus came the first knowledge of the healing art, which art was combined with that of priest. Æsculapius, the father of medicine, was held in such high repute that a grand temple was built for his use and to commemorate his skill, which, becoming so

great, Pluto became fearful lest his dominions should not be as speedily populated as was desired, interceded with Jupiter, who slew him.

Chiron introduced medicine into Greece; yet the knowledge of our profession up to this date is mostly legendary, or largely mithological. Hippocrates, about the eighteenth in descent from Æsculapius, was the greatest compiler of medical and surgical facts of his or any preceding era, having written as many as sixty books, and these are the first of record for which a second edition was called, and also the first of which a translation was made, notably into the Arabic language, and were thought to be of sufficient importance and authority to be quoted by as learned an author as Plato. Galen was the polished writer of his epoch, and did much to establish a high standard of medical literature, making it oft acceptable reading to scholars who sought general information. The Medici, for long years, because of their great learning and liberality, held power and ruled over the Florentine republic, and the papal power descended to a member of this celebrated family, who, though nominally of the profession, did little, individually, to advance medicine or surgery proper, yet gave much care and money to the advance of science, art and letters.

The first school of medicine, as might be inferred, was established at Alexandria, the supposed literary cradle of the world. The famous Norman conqueror, Griscord, about the eleventh century, established the celebrated school at Salermo, in Italy, which for long years was the first in rank of all Europe, and its importance and influence was due to the patronage of the Benedecine Monks of Monte Casino. It was from this school the African and Christian physician, Constantine, gave to the world his rich fund of medical learning, accumulated in his thirty-nine years of wandering and close observation and study.

From this school we have one of the grandest records of woman's true wifely nature. Sibyl, the beautiful and accomplished bride of Robert, son of William the Conqueror, seeing her martial husband sinking under the poisonous effect of a wound, although admonished of her danger, applied her dainty lips to the arm she loved above her life, extracted the poison and lived long to enjoy a rescued husband's love, and by her noble act (empyrical), gave us a valuable lesson on the power of the mucous membrane to resist poisons.

And 'twas here the poetic muse, through John of Milan, first sang of medicine and its cures:

"Salernia's school in conclave high unites
To counsel England's Kings, and thus indites:
If thou to health and vigor would attain,
Shun mighty cares, and anger deem profane;
From heavy suppers and much wine abstain."

And the good people of Belton, and our wise committee of arrangements have shown much good judgment in duplicating the poetic lesson.

Aramathus, a teacher of this school, gave out a rule by which too many have gained notoriety and well-filled purses at the expense of truth, viz: "To the patient promise recovery; to his friends declare him very sick." Even at this school the early initiative of patent medicine and quackery, in all its high-sounding deceptions and blandishing allurements, was taken. Many ideas, to us very ludicrous, found a teacher in that ancient school. One was to feed fat toads to hens, and eat that part of the fowl corresponding to the emaciated part of the human body desired to be developed. This would lead us to believe that even in that remote day there were angular spinsters and vapid dudes.

The wise laws of Frederick II. laid the first good foundation of law for the practice of medicine, and to this good day his wise laws have been very slightly improved on.

About the sixth century Greek literature in Italy became almost a sealed book, even to people of liberal education, and the works of Hippocrates and Galen began to be of tradition, rather than classic literature. But works of such literary merit and great importance were not to moulder in the dust; for while to some was given the power to heal, this power was coupled with the power of tongues, in that cultivated Christian gentleman, Constantine (the inventor of the truss), who, by his double gift, was able to rescue from oblivion the works of these great authors, and to give them to the Arabic people.

In the thirteenth century the idea of special practice was being entertained, and Roger made the first effort as a specialist in surgery; and five hundred years after this first attempt we enjoy the full fruits of this effort to the profit of the specialist and great good to the people. From this time on, as literature and the arts advanced with christian civilization, other schools multiplied, and Bacon in England, Gui de Chanliac in France, established such schools of medicine as to eclipse all others—that no longer the literature of the Mediteranean is triumphant. Rivalry in other nations stimulated the effort of establishing other schools that far surpassed Salerno in her richest era.

The opening up and peopling of the great Western Hemisphere brought with them the need for medical schools; and, as the Yankee never half way accomplishes a grand idea, and with the experience of these schools in these past centuries, is it any wonder that we excel; and that in our schools are met the child of the Nile, Arabia's and China's dark skinned children, and the Savans of Oxford, Heidleburg, and Paris? Indeed, no; for the stability and brilliancy of the acquisitive medical mind of this country with the Fulton's, Howe's, Morse's, Edison's, and Ead's have kept square abreast of all advancement, and by scientific attainments of high order, have established a reputation for medical knowledge and surgical art far surpassing all others.

Far in the bleak regions of a frigid North the glorious sunlight is shut out for long weary, wintry months, but about the termination of this wintry night, a sentinel is placed upon the highest grounds with connecting posts down to the habitable valley; and, as the first red streaks of solar rays break through the sensible horizon of this long, wintry night, first, from sentinels on the summit of the peaks rings out the glad acclaim: "the sun, the sun," then down to the last, this joyous news is wafted from post to post, and to the people. So, too, in the far distant past Æsculapius saw the light, and from this dark epoch he sounded a glad acclaim. From the sunny clime of Florence rang the welcome sound. Draco sang this light. Erastratus, Celsus, and Galen proclaimed, with no uncertain sound, the light they saw. Racamer (inventor of the speculum), from his profound emimence, discovered a light that brought to woman many joys. Velpean, DePaul, and Ramsbotham's quick eyes caught the glow, and as the brightening rays fell upon their minds, true to their trusts, they passed the word on down to Meiggs and McDowell, and to the mighty army of their day, who in turn passed the mystic word on down to Alabam's magnolia perfumed clime where Bozeman, Sims, and Nott stood as faithful sentinels on fame's watch-tower, and these great men proclaimed the light in grander tones than all their predecessors, until as if by one radiant scintillation from full orbed suns, a halo of light fell on thousand who had groped in a long night of darkness, and all earth is made glad by woman's joyous smile where erst a while was naught but piteous groans and anguish unrelieved.

The immortal Harvey, looking back through the long, dark ages, saw this light as its rich current coursed through the natural irculation. Ambrose Pare ligated this light as it fell upon his great soul. Mal-

gaigne, reaching out, bound it to many a shattered frame, and transmitted on down to ready messengers, of whom was Dungleson, Erichsen, Claude Bernard, Gross, Frank Hamilton and Stone, until yet another peak was reached, where stood Long, Wells, Guthrie and Simpson, who proclaimed yet a more brilliant ray to all this gorgeous light; and an Esmarch and Lister, the Agnews, a Bigelow, and Otis, shed their lights abroad until all obscurity is, as it were, transformed into a soft electric effulgence, which defies and banishes the darkness that permitted blood and pain, and tardy reparation; and while these were all heralding the glad, bright light, Eberly and Tanner, Rush and Wood, Watson and Trousseau, Barthlow and our Flint, with alembic light received from Chevren, Fownes, Sir Humphry Davy, and a Draper, passed it yet on down to trusted ones who are here in your midst, shedding these lights into the dark chambers of many a weeping, clouded household, bringing joy and happiness to thousands all over this State. And the long, dark wintry night is over; bright happy spring is passed and harvest time has come; natural and accidental darkness has given away to a brilliant noonday flood of light that shines for all, and thrice happy the people who have this light, and the student who lives in this nineteenth century, for it is certainly the scientific era of the world.

DR. SWEARINGEN'S EULOGY DELIVERED AT THE MEETING OF THE STATE MEDICAL ASSOCIATION AT BELTON, ON THE LIFE AND DEATH OF DR. T. D. MANNING.

LADIES AND GENTLEMEN: The State Medical Association held in Sherman, 1879, requested me to express regrets of members of the Association at the death of Dr. T. D. Manning, who died in Holly Springs, Miss., of yellow fever, September, 20, 1878.

Since then varions causes have prevented my presence at your regular meetings, and as this is the first opportunity offered for me to pay an humble tribute to my lamented friend, I know that this generous audience will pardon me for throwing a myrtle wreath over the beautiful garland already presented by our distinguished President.

'Tis true, many winters and summers have come and gone, and five generations of flowers, planted so tenderly upon Manning's grave, have bloomed and died and been forgotten! but, ladies and gentlemen, a life such as his cannot so soon be swept from the memories of men. Like the light of a blighted star, it will shine on, and on, and on, long years after the star itself is blotted from the heavens forever.

This charming hospitable city was once his home, and many of my hearers will know this brief eulogy is not an extravagant laudation.

I perhaps knew him better than any one, was associated with him in the same office for years, and saw him in every position calculated to test, exhibit and develop the human character.

I have seen him in the shadow of sorrow, and in the sunlight of happiness; when elated by triumph and when depressed by defeat; when censured and wronged, when commended and applauded; in the vigor of health, and in the agonies of death, and in every position found him filling to completeness the most perfect model of a pure, lofty, noble manhood.

As a physician he was honest, earnest and faithful. Too generous to be jealous; too great to be little. He needed no written ethics to

guide his professional steps. In his bearing toward his brethren his fine nature always exhibited that delicate consideration and splendid ethics that can only be written by the God of nature in the heart and soul of a medical man.

By no word or nod, or shrug of the shoulders, or wise look of conscious superiority, did he ever try to elevate himself on the ruin of another. No! He would not have planted his foot on the prostrate form of the humblest co-worker with him in the great field of disease and death, for the fadeless laurels of a Hunter or the immortelles that must live forever above the tomb of Jenner.

Endowed with a brilliant mind highly trained and well cultured, he grasped and mastered everything that could make him more efficient, and thus armed and equipped he scorned all tricks of trades and relied solely upon his own work and own genius for the reputation that was so rapidly won and that was so richly merited. Although young in years, his scholarly attainments and brilliant successes had given him high rank in the profession of Texas, and pointed to altitudes never yet reached by any of her gifted sons.

As a gentleman he was a finished model, and never, under any circumstances or conditions, did he forget that he was a gentleman.

He possessed all the elements of a manly character, so evenly balanced and distinctly marked that modesty was not mistaken for timidity nor self-reliance for arrogance.

He could exhibit pride without vanity, courage without bravado, charity without weakness, piety without fanaticism, and, rarest of all, purity without effeminacy, for he had nerves of steel, and could have carried the eagles of Napoleon or led the charge of the Light Brigade, a very arch-angel of war.

In his matchless character there was a symmetrical, harmonious blending of all that is pure and beautiful in woman, and of all that is noble and lofty in man.

His finely turned, sympathetic nature caught the vibration, and responded to every note of human suffering. Where some would bestow charities with great caution, fearful lest an unworthy object might be the recipient, he gave with a lavish hand, as though it were a pleasure and a blessed privilege to give.

He keenly appreciated and always remembered the duties, responsibilities and grandeur of his high calling; and when clothed in greater than magician's power he touched even a homeless mendicant, over

whose eyes an eternal night had settled, and said, "let there be light, and there was light," his generous heart was filled with a triumphant ecstacy that conquerors never felt and that crowns could not bestow.

It was an impulse of that fine nature, and a God-like aspiration to accomplish greater and better things, that induced him to take that last ill-fated pilgrimage.

Many of his friends believed that it was a reckless act, and that ambition was the inspiration.

Well, he did have a vaulting ambition, but it was not that twin sister of vanity, forever thirsting for the world's applause. He instinctively shrank from demonstrations that would have given blissful satisfaction to the pigmies of our race, but he could, and did, walk serenely into the valley of death, to surpass all other men in doing good.

It was called rash, because he had never had the yellow fever. We all know if he had passed through an epidemic, his going to a second one would have given no evidence of courage, for there would have been but little if any danger connected with it. No, gentlemen; the English language should furnish a better word to describe the motive power that impels a heroic soul to a grand immolation.

If his going to the relief of Memphis, and from there on down to beautiful, flower-crowned Holly Springs, to battle and die with her brave men and women, was a rash act, in all reverence I say it was rash in the Savior we worship to leave the courts of Heaven to redeem a fallen race. The One came at the bidding of the Father, the other went, impelled by the same spirit that gave splendor to the Hill of Calvary when temples and stars and heaven and earth reeled and rocked to the martyrdom of a God.

Men only perform reckless deeds calmly and deliberately when life offers no attractions, and oblivion alone promises comfort. Life for him was full of charms.

Every ripple of the river had a melody. Success and prosperity, hand-maidens of pleasure, came at his command. Fame had already proclaimed him a favorite child, and showered honors upon him. Friendship's richest tributes were around him. Hope's daintiest artist had frescoed a future of golden beauties, and love, almost divine in its purity, filled his heart with its sweet, soft, mystic music, as long as that manly heart beat the march of life.

Thus surrounded, with every effort crowned with success, with every day gemmed with a triumph, and every hour sparkling with joy, in the

bloom of youth and glory of manhood, he heard the cry for help and went down to those beleaguered cities. Yes, beleaguered cities.

True, no sentinels with measured tread, no bugle's blare nor cannon's roar was there. A more terrible enemy than man environed the doomed places and moved his noiseless battalions along the desolate streets, and through the poisoned air. Many of the inhabitants were prostrated by sickness, and many others appalled in the presence of the great unseen, unknown destroyer, while a gallant band, worn out, but never resting, grief-stricken, but unbending, were falling, one by one, like true knights, at the post of duty. Conspicuous among that gallant few, faithful, hopeful, daring, a pillar of strength for the weak, a light of guidance for the strong, moved that princely leader, the gifted, fearless, undaunted Manning.

At last his hour came. It has been my privilege to see in many forms

> "The power called Death,
> So feared of mortals."

I have seen the beautiful, sinless babe fade, like a blighted flower, upon its mother's bosom! I have seen old men, bending beneath the weight of years, calmly speak their last farewell, and without a murmur drift off into the dim unknown!

I have seen soldiers, whirling across the fiery field of Mars, go down amid waving pennants and nodding plumes, with the wild shout of victory upon their lips! But when the white banner of the Howard's fell from the nerveless hand of my noble friend, oh, how profoundly I realized the priceless value of a spotless life.

I once heard of a kingly eagle that received a fatal shot as he serenely sailed through a lovely valley; but instead of falling to the earth he ascended, and struggled up and up until he reached his lofty eyrie. There, where only eagles could soar, above the lightnings and above the storms, he calmly folded his pinions and died without a struggle.

When an arrow from the Great Destroyer struck that brightest mark of all, and the dying philanthropist looked back over the valley of life and saw it gemmed and macadamized with noble thoughts and manly deeds, he too seemed to rise to higher altitudes, above the shadows and doubts and storms of this world, illumined by a hope that modern philosophy had never dimmed, and sustained by a faith stronger than the wings that bore upward the dying eagle.

My friends, all of us cannot ride upon the wings of such a faith! Nor can we all achieve distinction, have marble tablets to perpetuate our names, nor splendid mausoleums to tell where the journey ends; but in the twilight and the darkness, where sorrow broods in silence and the angel of death stands waiting, if we faithfully fulfill our holy mission we can have our images embalmed in grateful hearts, and after our last call is made, let us hope, above our humble resting place some loving, gentle hand will plant, with tears, the myrtle and the rose.

The vast flood of waters that pour over the falls of Niagara, ere they reach the base, are dashed and dissolved into a cloud of mist and vapor, but the sunbeams, winding their rays of rose, violet and vermilion through the silvery mist, weave rainbows of beauty to span the dark abyss.

When you, my brothers, reach the borders of that greater falls than Niagara, that unexplored canon between time and eternity, and the surging currents of existence are dashed and dissolved into ethereal mist, may the sunbright sheen of noble lives weave for each of you, as it did for Manning, a glorious rainbow of hope and promise.

SECTION ON PRACTICE OF MEDICINE, MATERIA MEDICA AND PATHOLOGY.

CONTINUED FEVERS.

BY S. H. STOUT, A. M., M. D., CISCO, TEXAS.

IN obedience to the request of the Chairman of the "Section upon the Practice of Medicine, Materia Medica and Pathology," this paper has been prepared. It has been the object of the author to arouse attention to the careful study of fevers, both idiopathic and symptomatic, rather than to propagate a theory or invent new names; and to impress the importance of a careful diagnosis in every case we are called upon to treat.

Though satisfied of my inability to suggest any novel ideas touching them, I shall confine the proposed discussion of Continued Fevers to the expression of convictions that experience and the literature of the subject have forced upon me.

At the very outset, it is proper to premise my conviction, that in the past as well as at the present time, it has been too much the fashion of the average medical mind to seek for new idiopathic fevers and specific diseases of novel traits and types, rather than to carefully study known types of disease and to diagnosticate the true condition of each patient submitting to treatment. There is everywhere a popular demand for specific names for disease (the newer the better), and especially to recognize every case of symptomatic fever as a specific one, and as such entitled to a specific name. For instance, frank pneumonia, one of the best known of the phlegmasiæ, is, in many communities, called pneumonia fever; this expression being used to imply that every case of pneumonia is a peculiar type of idiopathic fever, instead of being

used to express the fact that the general febrile state of the patient is symptomatic of pneumonia.

EVERY GRAVE INFLAMMATION

of any organ or part of the body may provoke a symptomatic fever, and the grade and duration of that fever depend greatly upon idiosyncrasy, temperament, the greater or less importance of the organ or organs inflamed, and their synergical relationships, upon reflex impressibility, age, the state of the nutrition of the patient, his general condition, whether sthenic or asthenic, etc., etc.

Before proceeding to the discussion of Continued Fevers, it is proper to endeavor to clearly understand what is meant by this nomenclature.

Typhoid and typhus fevers (the typhus mitior and typhus gravior of former generations), all of us admit to be idiopathic continued fevers. The exanthemata are not usually classed as continued fevers, nor are yellow fever and relapsing fever. Of these two last named fevers, it has never been my fortune to treat a case.

YELLOW FEVER

is admitted by all writers of the present day to be a fever of one paroxysm, the fatality consequent upon it being attributed to its sequela, both general and local.

The literature of

RELAPSING FEVER

is not satisfactory to my mind. It is so confusing as to arouse a reasonable doubt whether there is a fever so distinct from typhoid, or from malarial fever, as to justify giving it that specific name. For some writers, claiming to have come in clinical contact with it, describe a type of fever very much resembling a mild form of typhoid fever; while others describe a form of relapsing asthenic malarial fever, with which those of us who have practiced long in malarial localities have often met.

The well-known

PAROXYSMAL FEVERS,

of malarial origin, are generally conceded to be idiopathic, and are properly classed by pathologists among the neuroses. Clinical observation proves that in paroxysmal fevers the morbific agent first causes disturbances of the nervous equilibrium, the vascular disturbances being consequent thereon and sequent thereof.

Whenever a paroxysmal (malarial) fever provokes a grave local inflammation, although the idiopathic fever may have been broken up

by anti-periodics, we often see a continued symptomatic fever, more or less serious and of a greater or less duration, the causes and contingencies already enumerated, as factors of variation of gravity and duration of a fever originally symptomatic, being in this also of full power and force.

INFLUENZA

is a continued fever, the morbific cause of which varies in the intensity of its impressions at different times or seasons, and in its power of impressing different individuals. The morbific cause of influenza, next to vicissitudes of temperature, errors of diet, etc., is the most frequent provocative of abnormities of the mucous lining of the body. The synochus and synocha of our predecessors (the inflammatory continued fevers of their nomeclature), the former a more grave type than the latter, almost daily to be met with in practice where the country is open, and the non-crowded condition of population does not favor blood-poisoning, were no more nor less than the common continued fevers of the present day, whose varied phases have tempted the experienced and seekers after novelties in nomeclature to describe them as new diseases, and in the discussion of which the observations and experience of past ages are almost totally ignored. This is to be regretted, when it is considered that a large majority of the cases physicians are called upon to treat are fevers. While in our day pathology and therapeusis have made great advances, we cannot afford to neglect the study of the history of diseases. Every well proven fact in regard to them, whether observed by Hippocrates, Galen, Sydenham, Cullen, Chapman or Drake, may help us in diagnosis and treatment. How much soever we may boast (and with justice, too, we may do so,) of our superior knowledge of pathology, pathogenesis and remedial treatment, it can scarcely be denied that their observations of the phenomena and course of diseases, comprehended under the head of symptomatology, were most careful and accurate, and their records thereof most faithful.

THE SYNOCHA AND SYNOCHUS

of the fathers had their origin in the morbific cause of influenzas, or accidental or wilful failure to avoid those causes that tend to congest the skin and mucous membranes, or otherwise to interfere with or interrupt the healthy performance of their formations.

Now modify the mucous irritation or inflammation of any locality of the alimentary canal, or of the air or urinary and genital passages, by any cause persistently or gravely impressing the nervous system

(whether of animal or organic life), and we have a condition of organism favorable to the development of a symptomatic continued fever, persistent and grave in proportion to the persistence and gravity of the modifying cause or causes.

Mucous irritation, interrupting digestion and nutrition, may originate nervous disturbances, persistent, though slight gastritis, especially if the epithelium of the stomach has desquamated, will often keep up a continued fever, which in many of its symptoms imitates the typhoid fever of Louis.

Should irritation and thickening of the mucous membrane of the duodenum obstruct the ductus communis and secreted bile becomes locked up in the gall bladder, absorption of bile follows, the tissues of the body are tinged by its coloring matter, and we then have a case of what is sometimes called catarrhal jaundice. Sometimes it is recognized under the name of atonic jaundice, and when there are numerous cases of it in a community, it is called epidemic jaundice. During the recent prevalence of influenza in and around Cisco, there were numerous cases of this form of jaundice—none fatal.

Where a morbific agent, whether epidemic or accidental, seriously irritates or inflames the jejunum or ileum, or both these sections of the intestines, a series of symptoms announce to the thoughtful and intelligent practitioner that he must be careful of his diagnosis. For it is of the gravest importance that he then satisfy himself whether he has a case of verminous irritation, acute sthenic or asthenic inflammation of the mucous lining, or a typical case of the typhoid fever of Louis. The heat of the abdominal wall, the soreness of the bowels and the indisposition at the outset to evacuate their contents even under the influence of ordinarily active cathartics, are some of the evidences that forbid the diagnosticating of typhoid fever.

Typhlitis, though most commonly sporadic, I have seen, during the prevalence of an epidemic of influenza, provoke a symptomatic continued fever of several days' duration.

I am satisfied that I have met with cases of colitis during the prevalence of an influenza, that kept up a continued symptomatic fever for from five to fifteen days, without the manifestation of any of those symptoms regarded as pathognomonic of dysentery, viz: tormina, ten esmus and bloody mucous discharges.

Dysentery, during the prevalence of an epidemic of influenza, is

sometimes more frequent than at others—so frequent, indeed, as to be regarded and popularly denominated epidemic flux.

The epidemic cause of influenza, often impresses the muscular and other fibrous tissues; sometimes so generally as to provoke a case of rheumatic fever. If the impression is most profound upon the muscles involved in the work of respiration, an accurate knowledge of the physical signs of abnormities of the thoracic viscera, is necessary to the successful differentiation of the local rheumatism from pleurisy, bronchitis and pneumonia, when none of these phlegmasia exist, and to recognize them if co-existent.

In organisms (especially those of children) whose fibrous tissues are easily impressed by morbific influences, it sometimes happens that the meninges of the brain and spinal cord, especially the duramater, becomes inflamed. Exudations occurring on the surface of the duramater, and the inflammatory process extending to the underlying membranes and cerebral substance, we have cerebro-spinal meningitis. Should a considerable number of such cases occur, during an epidemic of influenza, the sensationalists announce the prevalence of spotted fever, a misnomer, if used to designate a specific idiopathic fever.

Sometimes under the influence of an epidemic morbific cause, as well as vicissitudes of temperature, catarrh is developed in some part or parts of the urinary and genital organs, which may provoke a form of continued symptomatic fever.

THE TYPHOID FEVER

of Louis (the enteric fever of Wood) is and has been a *vexata questio*, ever since Louis first described it, as a distinctly specific disease, characterized by a peculiar eruption, and inflammation and ulceration of the solitary and agminate glands of the ileum. I walked the wards of the Pennsylvania hospital for a year, when Gerhard, a pupil of Louis, Wood and Pepper, were demonstrating its existence, and while Chapman, the greatest authority on medical practice of his generation in America, was lecturing at the University to a class of five hundred students, in opposition to the theory of Louis, and asserting that the so-called specific typhoid fever was no more and no less than the typhus mitior of previous writers and observers. To the teaching of Louis I was a conscientious convert, and am convinced that Gerhard, in his wards and the dead house, demonstrated the truth of its existence beyond a doubt. In the wards where he made this demonstration, he acknowledged cases of genuine typhus corresponding to Chapman's description of typhus gravior.

Since that period the literature upon the subject of typhoid fever has grown fast and into great magnitude. Much of it is of great value. Much of it, too, is unsatisfying, the prenomen typhoid being often used by writers to designate any and every form of slow fever of the asthenic type, and characterized by low, muttering delirium, tympanites and diarrhœa more or less pronounced. Hence the most contradictory views of this disease find utterance in the journals, and practitioners in the same communities are often found whose diagnosis of a prevailing continued fever is contradictory, much to the confusion of the laity and the discredit of our profession. Now, if we call a disease typhoid fever, let us be sure it is that specific type so named by Louis, or abandon his teaching on that subject altogether, and fall back upon the teachings of his predecessors, who described a variety of diseased phenomena under the title of typhus mitior and typhus gravior, wherein there was infection and blood poisoning, with its consequences variously expressed by symptoms and lesions.

Of all the various expressions of disease heretofore described under the two classes of typhus, the typhoid fever of Louis is the only one which seems to be specific, and characterized by a well defined eruption and certain lesions seated in the ileum. That there are many phases of inflammatory and malarial fevers, in which blood poisoning is a factor, adding to the gravity of cases, is not to be denied, but that they are not in every instance the specific infections of typhoid fever of Louis, must be borne in mind, in practice as well as in the reports of our clinical experience.

If we would arrive at a proper knowledge of diseases, especially fevers, of a low grade or type, we must be more careful of our diagnosis, and definite in our nomenclature. Without the former our own experience will prove of little value, and without the latter we cannot profit by the experience of others, or make our own to be understood by those who shall follow after us. If we would arrive at a correct knowledge of typhoid fever, we should confine the name to the disease described and so designated by Louis or discarded altogether.

Typhus (the historical typhus gravior) is a fever not specific (though often highly infectious) like the typhoid fever of Louis. In it there is a blood poisoning provoked in jails, in filthy hovels, and other localities by the putrid effluvia of decaying organic matter. Its infecting potentiality and gravity depend upon the character of the circulation of the atmosphere surrounding the patient, and upon the activity of the pro-

cess of putrifaction, which may be going on in the tissues, fluids, and excreta of his body. Typhus (sometimes not inappropriately called putrid fever), greatly varies in its gravity and durations, and symtomatology. It is a rare disease outside of crowded cities, filthy prisons, and badly policed military encampments.

Like the epidemic cause of influenza,

MALARIA,

besides inpressing the general system in its own puculiar manner, may under the influence of the secondary causes and contingencies already alluded to, be the prime factor in the development of local congestions, irritations and inflammations, that so much vary the expressions of periodical fevers and increase their duration and gravity, not only before their paroxysms have been broken up by anti-periodics, but also afterwards.

The grave local inflammatory abnormities incident to malarial fevers, and sequel thereof, have given origin to the now fashionable pathological heresy, that has uttered the dogma, that there is a specific fever entitled to be called—

TYPHO-MALARIAL.

Whenever in matters of science any individual or individuals assume to announce a theory, a principle or a fact, unsupported by evidence, it matters not how exalted in position and reputation they may be, they are guilty of dogmatizing, which in medicine, is most fruitful of error in theory, and promotive of routinism in practice.

Recognizing inflammation (of greater or less gravity and extent) of the mucous lining of the body as the chief factor of the continuation of fevers provoked primarily by sporadic causes, by the morbific agent of influenza, and by malaria, in the absence of a better nomenclature (if we must generically denominate them fevers) I prefer to use the adjective catarrhal to specify them. For the noun catarrh, signifying inflammation of the mucous membrane, the adjective catarrhal prefixed to the word fever, is more nearly indicative of the true pathology of the numerous cases of symptomatic fever we are all frequently called upon to treat.

The prolongation and fatality of idiopathic fevers are mainly due to disturbance of function, malnutrition and lesion of mucous membranes. Reflected disturbances and the extensive (almost universal) synergical relationships of the mucous membranes with other parts of the organism, afford a rational theoretical explanation of this fact. It is

proper therefore, whenever in clinical charge of a patient in a febrile condition, that the practitioner shall carefully investigate the condition of the mucous membranes of all parts of the body. Not only should he endeavor to ascertain the location of abnormities, but also, if possible, their character and extent. For in every case of fever, it matters not to what cause it may owe its origin, some part or parts of the mucous membranes are in an abnormal state.

The custom, of immemorial usage, of examining the tongue, palate and fauces of a patient at almost every visit, owes its value, as an aid to diagnosis, to the hints, thus obtained of the state of the mucous membrane there and elsewhere situated. Yet how often is its examination regarded as mere form of clinical conventionalism!

Unless a practioner shall give laborious, intelligent attention to the the mintute diagnosis of each and every one of his cases exhibiting the febrile state, his notion in regard to the fevers he treats, will ever be vague and undefined, and his practice unsatisfactory. If content to merely nominate a disease, and indifferent to its etiology and true pathology, he is destined to play the *role* of routinist; and, if a conscientious and humane man, to experience at the bedside of his dying patients that bitterness of regret that follows mortifying defeats and disappointments, the wages of ignorance and neglect of duty.

THE TREATMENT

of fevers whether continued, paroxysmal, exanthematous, traumatic or toxic, involves in its full extent the whole field of pathology and therapeusis. Volumes, almost numberless, have been written and will yet be written without exhausting the subject. Nineteen-twentieths of the time spent at the bedside by the general practitioner, is occupied in diagnosticating and treating fevers. Upon their successful treatment in all their forms and types, mainly depends the respectability and usefulness of our profession. More victims are slain by fevers than by all other diseases.

Only a brief outline of my views upon this branch of the subject will be attempted here. They will, however, be presented from the standpoint of experience.

Called to a patient with febrile symptoms, my inquiries are first directed to the age, sex, habits, (moral and physical) occupation and mode of living of the patient, to the family and individual nosological history, and the history of the particular attack under which he is labor-

ing. The next effort is to ascertain whether it is a toxic, traumatic, malarial or specific fever. The temperature, the state of the general circulation, and nervous abnormities are then carefully noted. The locality where the patient is or has recently been residing, and the character of the epidemics prevailing there, are thoughtfully considered; because those epidemics aid in the determination of the character of the fever, if not of toxic or traumatic origin.

Whether the fever be idiopathic or symptomatic, careful investigation must be had of the nature, extent and situation of local departures from the healthy state, and the influence of these local abnormities as original or secondary causes of unrest, reflected irritations, pain, thirst, anorexia, etc. On the first visit to a patient laboring under fever, it is important to weigh well his recuperative energy, the probable duration of his disease, (even if a favorable termination is probable) as well as the nature, extent and situation of the local abnormities. Without a condsideration of these, the practitioner is liable to err in two extremes, viz: his treatment may be too active and heroic, or two conservative and expectant. A knowledge of pathology and symptomatology is then invaluable, both to the patient and practitioner. For upon it depends the life of the former and the reputation of the latter.

Just here the temptation is irresistible to remark that owing to the great activity of the drug trade, the millions of money invested in it and the great profits that often accrue therefrom and the advertising capital it commands, it is too much the fashion of writers upon medicine (owing no doubt, to the daily pressure upon them to try new remedies) to devote more space to the discussion of their value, than to the discussion of the pathological phenomena of their cases, a proper knowledge of whose causes is of more value to suffering humanity than all the drugs of the shops. For in the treatment of diseases, if the practitioner is familiar with the pathology of his cases, and is able to diagnosticate them with minuteness, experience teaches him that only a few medicines judiciously chosen and skillfully prescribed, are needed in the treatment of fevers.

Some of these it may be proper now to enumerate. Mercurials, anodynes, arterial and nervous sedatives, diaphoretics, diuretics, purgatives, diluents, demulcents, counter-irritants and emetics may be indicated in the treatment of fevers. It would be well for every young practitioner at the outset of his career to resovle to study the *modus operandi* of one or two of each class, and by persistent practice with

these, learn to use them skillfully. The numerous medicines of every class are well calculated to daze him. If he tries to use any large number of them before acquiring skill in the use of a few, he will find his judgment constantly wavering, as to their relative merits.

The materia medica are to the physician what the contents of his chest of tools are to the joiner. That chest may be well filled, but the daily use of its contents is confined to very few tools.

When a workman, young or old, proposes to put a straight edge upon a board (whether he is enlightened enough to be aware of it or not), he practically recognizes the principle that the rays of light proceed in straight lines. But one joiner, in fitting his work, will use his drawing-knife more than he does his plane, while another will use his plane more than his drawing-knife; yet both may put together a first-rate job.

So physicians and surgeons, guided by principles, may use different articles of the materia medica, and operate in different methods, yet have equally favorable results.

This digression, in preface of what follows, rationally accounts for the equally favorable results of treatment reached by skilled practitioners, though using different drugs. The indications for treatment being understood and recognized, they use different articles of the classes of medicines needed to fill those indications.

Therefore, in the brief outline of my preferences for certain drugs in the treatment of fevers, it is not intended, directly or by implication, to condemn the practice of those who prefer other drugs, of equal potency for good, when prescribed by them.

OF THE MERCURIALS.

When a mercurial is needed I prefer, both as a purgative and antiplastic, calomel. Long study of its effects and *modus operandi,* and its almost uniform purity, as found in the shops, are the grounds of this preference. It is in a more convenient form for the pocket-book or saddle-bags of the general practitioner, who has often to dispense medicine at the bedside of his patients, than blue mass. In the form of saccharated calomel (in the proportion of two grains of hard white sugar thoroughly triturated with one grain of calomel), we have an excellent and unchanging preparation, which answers all the purposes of blue mass. In this form I have been accustomed to its use from my earliest pupilage in medicine. Of this mixture I have often seen four grains, put upon the tongue and swallowed with the saliva alone, produce as prompt effect as a purgative as ten grains of blue mass. Its

purgative effect is rendered more certain if the patient abstains from drinking water, or any other fluid, fifteen or twenty minutes after it is placed upon the tongue.

As in all fevers of the sthenic type, there is a call for antiplastics. Mercury has been found the most valuable of our remedial resources, when judiciously used.

The condition popularly termed biliousness is, in many cases, a misnomer. That condition is oftener owing to deficient or vicious secretions by the mucous membranes, than to inactivity of the liver; and the purgative and anti-plastic effects of the mercurial medicines is due more to their arousing of the secretions of those membranes and the consequent relief of their distended capillaries, and the purging their surfaces of the vitiated secretions and excretions in contact with them, than to stimulation of the biliary secretions, which is also generally aroused by their use.

The habitual use of small and frequently repeated doses of ice water by residents in tropical climates, is a well-known preventive of this so-called biliousness. It prevents capillary engorgements of the mucous membrane of the stomach. The cooling and soothing effect of the juices of the lemon and orange is generally taken advantage of by the residents of Southern Georgia and Florida, as a preventive as well as a cure of so-called biliousness.

In deciding to use or not to use a mercurial for its anti-plastic effect, care must be taken to note the probable condition of each patient's blood—whether its plasticity is above or below the normal standard, plethoric or anæmia or scorbutic, or poisoned by agents visible or invisible, that tend to destroy its nutritive power.

Under the guidance of an improved pathology and a better understanding of their *modus operandi*, practitioners are acquiring more skill in the prescription of mercurials; and fewer abuses of them are seen at the present day than were to be met with during the last generation. During a clinical experience of thirty-six years, in the use of mercurial medicines, it has never been my misfortune to cause any patient's teeth to drop out from excessive ptyalism, or to otherwise inflict by their use any permanent injury to the organism of those I have treated. It has ever been my rule never to push mercurial preparations beyond that point when there can be discovered a white line upon the edges of the gums, or a faint odor of the breath characteristic of mercurialization. Pushed further, in any case, I have never seen any better results follow;

on the contrary, only evils to the organism. In my pupilage and the earlier years of my practice, I was contemporary with many practitioners of a former generation, who pushed mercurialization, in inflammatory fevers, to an absurd extent, and attributed the salvation of their surviving patients to the excessive ptyalism they had purposely inflicted; a claim as absurd in theory as it was injurious in practice.

While in plethoric patients and fevers of a high grade the anti-plastic effect of mercury is of priceless value, it must be borne in mind that anæmia and scorbutic patients, and those habitually badly nourished, do not generally tolerate its use; and if used in their diseases it must be prescribed with great caution and discrimination, and its effects carefully watched.

OF ARTERIAL SEDATIVES

We have a numerous list from which to choose. From habit, extending over a period of a quarter of a century, at least, I rarely use any arterial sedative save tincture of aconite root, in half drop doses, repeated as occasion requires, and until its influence is felt. To each drop of the tincture are added two teaspoonfuls of water. Of this one teaspoonful given *pro re nata* in intervals of from fifteen minutes to two hours, more uniformly accomplishes better results than I have ever obtained from minute doses of tartarized antimony, nitrate of potassa, the sweet spirits of nitre, the neutral mixture or the effervescing draught. I always carry an ounce vial of it in my pocket, and dispense it at the bedside.

Ice water, or small pellets of ice, in sthenic fevers has always proven, in my hands, a valuable aid to recovery, and very comforting to the patient.

Of the anti-periodics, tonics and appetizers, SULPHATE OF QUININE is of acknowledged pre-eminence. In the treatment of fevers, of all kinds, in which periodicity of exacerbation is a feature, it is invaluable. It has been my privilege to note the triumphal progress of this medicine in the esteem of the profession, from the time when worthy practitioners feared to prescribe it, save in conditions of complete apyrexia, to this day, when its wonderful virtues have won for it high honor in the variety of uses to which it is put in the work of ameliorating human suffering and preserving human lives. But a short time before I entered upon my medical pupilage

DRS. FEARNE AND ERSKINE,

Of Huntsville, Ala., had startled the conservatism of the medical world by announcing the success of the practice they had originated of giving

heroic doses of quinine in the pyrexia, and the cold stage of paroxysmal fevers of malarial origin, as well as in the sweating stage.

DR. HARNEY,

Of the U. S. Army, had also published the happy results of his own practice, in Florida, wherein he had given as much as eighteen (!) grains in one dose, with favorable results, in grave malarial fevers. It has been interesting to watch the discussions upon the propriety of the then startling innovation of Drs. Fearne and Erskine, and now, after the lapse of more than the third of a century, to recall to mind the many happy consequences of their bold use of this valuable medicine. It is foreign to the present purpose to enter into a discussion of the *modus operandi* of sulphate of quinine, and other constituents of the Jesuit's bark, or to point out the variety of indications, in the treatment of disease, they may be used to meet. Suffice it to say, that but for the bold and original practice of Drs. Fearne and Erskine much of the malarial regions of the Mississippi Valley would have been tenantless, where now there are broad plantations, beautiful farms, thriving villages and cities, and intelligent and refined populations. He that would excel in the treatment of fevers of every type, must study the powers of quinine, as an anti-periodic, and measure his doses thereof with wisdom and discretion. For whenever disease, of whatever kind or name, betrays a periodicity of nervous phenomena, quinine, timely used, is ever potent to palliate (if not to cure), by its anti-periodic influence.

The wise practitioner will ever be careful to avoid routinism, in using it, but in all cases have a due regard to the etiology, and pathology of each case of disease he may treat, and prescribe the quantity and the time of administration of the medicine in reference to the end he aims to reach by its aid.

In almost every case of fever, experience vindicates the time-honored practice of using demulcents, cold mucilage, of slippery elm, of Gum Arabic, of flax seed, or of the prickley pear leaf pared and sliced, proves more gratifying to a thirsty, feverish stomach than simple water, and affords a small amount of nutriment. Like lime water and sweet milk, it tends to relieve the collapsed walls of an empty stomach from annoying and nauseating friction against themselves.

Among the most valuable soothers of irritation of the muocus membranes of the alimentary canal, is

SUBNITRATE OF BISMUTH.

The *modus operandi* of this medicine in abnormities of the mucous

membrane of the alimentary canal, is doubtful; so much so, that many able medical men question its utility. But clinical experience vindicates its now common use, and as I think, upon plausible theoretical grounds.

Though it may not be absorbed into the circulation (and it is probable that it is not,) it no doubt soothes the irritated membranes in several ways. It furnishes a mechanical coating, thus soothing irritability of the mucous membrane, as it or starch, or lycopodium, or oxide, or carbonate of zinc and powdered clay are known to do, when applied to the irritated and abraded skin. As clay and chalk, it is antacid and absorbent. It acts chemically upon sulphuretted hydrogen, and thereby diminishes the volume of gas pent up in the bowels. This chemical action is shown in the blackening of the fecal matter discharged, when the medicine has been administered in sufficient quantity to make a show of this discoloration. Subnitrate of bismuth may be freely used in almost every case of fever, to soothe the irritability of the mucous membranes of the alimentary canal.

In former times, reputable practitioners used to report good results from heaping teaspoonsful doses of calomel, when excessive ptyalism did not occur. Since the introduction of subnitrate of bismuth, those large doses of calomel have been rarely advocated. Doubtless, in many of the cases, whenever enormous doses of calomel were administered without more evil resulting than was reported, much of the medicine failed to impress the organism more than any un-irritating heavy powder would do; and after answering, like bismuth, the purpose of a coating for the inflamed membranes, passes out of the body with the excrementitious matter, in which it became entangled.

Of all the simple purgatives, experience gives preference to

CASTOR OIL,

in every case of fever, wherein there is an indication simply to clear the alimentary canal of its contents. Though to many persons the most offensive, it is the mildest and most manageable of all purgatives, especially when the patient is confined to his bed. No safe substitute for it has ever yet been discovered. If it fails to purge, it is a food, and rarely irritates.

Of diaphoretics and sudorifics in fevers, experience gives preference to

DOVER'S POWDERS.

Prescribed with judgment and discrimination, it will more rarely disappoint the practitioner than any of the diaphorectics and soporifics of the pharmacopœia.

Diuretics are not as often urgently needed in fever, as is the popular demand for them in private practice. Unless the urinary track is the seat of serious abnormity, medication addressed to it is not often needed; and in ordinary fevers, flax seed and watermelon seed tea (cold) may (innocent of evil) be allowed. Strangury generally promptly yields, if in addition to one or the other of the above mentioned teas, half a teaspoonful of Hoffman's Anodyne be administered every half hour. This old remedy has stood the test of time and experience as the most prompt soother of irritation of the neck of the bladder in fevers, as well as in those frequent cases of irritation of the neck of the bladder in pregnant females, and those laboring under diplacement, distortion and engorgements of the uterus. Much of this medicine upon the market does not contain the officinal amount of etherial oil. But if the requirements of the pharmacopœia are rigidly heeded in its preparations, its prescriptions for the purpose mentioned, will rarely disappoint.

The fashion of the former generation of allowing fever patients to use

SWEET SPIRITS OF NITRE

almost *ad libitum*, experience taught me to condemn many years ago. It is not as cooling as was claimed for it, and after several doses are taken, it seems to increase rather than diminish thirst.

OF COUNTER-IRRITANTS,

no attempt will here be made to exhaust the subject. Against the former habit of torturing young children and adult patients of a highly impressible nervous temperament with blisters, the sentiment of the body of the profession of the present day has long since entered its protest. The choice of the time and emergency, when blistering should be resorted to in fevers, involves a grave responsibility, too often thoughtlessly disregarded. The consideration to be had in concluding when and what indication in diseases call for blistering, are numerous and comprehensive.

In as much as a large blister often stimulates the organism generally, the proper time to prescribe one should be carefully chosen. When the skin is dry and hot, and the pulse full and strong, it is always of doubtful propriety. In grave cases of inflammation of the mucous membranes, in peritonitis or pleuritis, which have prolonged a fever, the most opportune moment at which to apply a blister, is when the skin begins to feel soft and moist, and the force of the circulation is moderating.

Adjuvant to other diaphoretics and antispasmodics, a hot foot-bath at bed time, or oftener, is frequently indicated, the brain, if need be, being guarded from injury by the application of cold water to the head.

In a large number of cases of fevers, idiopathic and symptomatic, there is somewhere, of greater or less extent,

DESQUAMATION OF EPITHELIUM,

a fact which, though recognized in the treatment of the sequela of the exanthemata, is often not thought of, or (if thought of) is disregarded in the management of continued and paroxysmal fevers. No doubt many a fever patient has succumbed, unnecessarily, because of this oversight. In consequence of this unheeded and unrepaired desquamation ulcerations vitiated and irritating secretions, and abnormal exudates often occur. If throughout, the whole alimentary track, and the air, urinary and genital passages, it were possible to make local application as successfully and intelligently as is done to the schneiderian membrane, the lining of the throat, larynx, vagina and uterus, our success in the treatment of the concomitants and sequela of fevers would prove much more successful than it now is.

In certain states of the inflammatory process in the conjunctiva, the urethra, the vagina and uterus, a flow of greenish secretions and abnormal exudates is often observed. But this greenish tint of the evacuation of the stomach and bowels is, by many practitioners, uniformly attributed to the presence of an abnormal quantity of bile, without a suspicion being entertained that some part of the mucous membrane of the alimentary canal is suffering from the inflammatory process, and that the green or greenish tint may be due to the acidification of the vitiated mucous and abnormal exudates, from the inflamed membranes. Thus the liver receives a large share of attention, and abnormities of the mucous membrane are not recognized as frequently as they ought to be, in the treatment of fevers.

The indications for the local treatment of inflammations and lesions of the mucous membranes, (among which latter desquamation of the epithelium is generally the first to occur,) are to secure rest to the part involved, by the timely removal of irritating ingesta, and other foreign bodies and irritating secretions and exudates, and to protect the diseased surfaces from their continuous contact. The scope of this paper forbids the attempt to enumerate all of the means that may be resorted to to meet these indications.

When the air passages are involved, their upper parts are in reach of local applications by aid of the laryngoscope, the rheinoscope, the atomisers, the probang, etc. But in fevers, as the abnormities of the mucous membrane of the alimentary canal do most complicate our cases, there are many and obvious difficulties in the way of successful local treatment. Instead of to water, as cleansers, we have here to resort to emetics, mild purgatives and enemas. Instead of dry dressings to exclude contact of air and microscopical organisms, resort must be had to such applications as necessarily become moistened by the fluid and semi-fluid contents of the canal, and which protect by their chemical or mechanical action upon the tissues or the secretions therefrom.

Of the modus operandi of—

CHLORATE OF POTASSA,

now much used in catarrhal affections, and in diphtheria, the explanation usually given is based upon the hypothesis, that it gives out its oxygen to the blood, in such a manner as to prevent cyanosis and to promote the solvibility of exudates of abnormal fibrine.

For some years past—

BENZOIC ACID

has been used by me with highly gratifying results, in affections of mucous membranes wherein epithelial desquamation exists or is suspected. I use it in solution or dry as the patient may prefer and *ad libitum*. In those cases in which the patient complains that everything he swallows feels hot as it passes the fauces and œsophagus, it uniformly relieves or paliates. Could it be made to spread over a desquamated duodenum, jejunum, ileum or colon as it can be made to do over the lining of the fauces, and œsophagus and the stomach, I doubt not many of our cases of fever, wherein those regions of the alimentary canal are the seats of desquamation and its sequela, that now often prove fatal, could be promptly relieved.

The gratifying results wrought with benzoic acid as above stated, is a vindication in part of the practice, in vogue for ages, of prescribing the balsams, in affections of the bronchial tubes and the alimentary canal. If, as is now claimed, benzoic acid is an antiseptic and its therapeutical value in desquamations and ulcerations of mucous membrane is satisfactorily proven, the frequent prescription by practitioners of former generations of Balsam Tolu, in cough mixtures and of Co-

paiba, in chronic affections of the bowels and urinary apparatus, is fully vindicated. For benzoic acid exists in all the true balsams.

In Texas, owing to the outdoor employment of many of the people, and their almost exclusive diet of bread, meat and coffee, many patients of both sexes and all ages are to be met with whose diseases are complicated and rendered somewhat unmanageable by—

SCORBUTUS.

The physician whose experience has been confined to civil practice, cannot form an adequate idea of how easily and quickly the blood of patients may become scorbutic, when subjected to its usual provoking causes. Since I have been in Texas I have met with one case of scorbutic blindness, which yielded promptly to anti-scorbutic diet alone. Scorbutus is an evidence of serious impairment of vital energy—a proof that the *vis medicatrix* is impaired. In a sparsely and newly settled country, the conditions that provoke scorbutus, are as sedulously to be avoided, as among soldiers and sailors. Yet many practitioners seem not to be aware of the frequency of the presence of scorbutus. But he who would secure reasonable success in the treatment of fevers in this newly settled State, must be ever on the *qui vive* in regard to it, and prescribed when it exists, with reference to it. Many obstinate cases of ophthalmia, (especially granular conjunctivitis) nasal catarrh, chronic pharyngitis, uterine disorders, chronic sores from slight wounds, etc., may be seen in Texas, that cannot be successfully treated without putting the patient upon anti-scorbutic regimen and diet.

Doubtless the scorbutic element in many cases of common continued and paroxysmal fevers, is the chief factor of fatality; for it always promotes asthenia. A failure to recognize this scorbutic element has helped to produce the popular and professional mania, now so prevalent, to discover new fevers and to give new names to old ones.

In a sparsely settled, and an open country, though long settled, the typoid fever of Louis, and *typus gravior* of the ancient writers are of rare occurrence. But there we may expect to find the synochus and synocha of Sydenham and Chapman, and the paroxysmal fevers of malarial origin, modified by and presenting various phases of expression, due to circumstances and contingencies, that accompany the topography and the mode of living, the pursuits and hereditary and acquired idiosyncracies of the patients themselves.

Thus malarial hæmaturia is liable to occur in patients exposed to malarial poisoning, and is no more a new disease than obstinate epistaxis, chronic splenic enlargement, purpura, hemorrhoids, and metrorhagia that often result from the same cause, whose best remedies are quinine, the opiates and the chalybeates judiciously prescribed.

Objectionable as is this paper, on account of its length, in conclusion it is proper to remark:

1st. That what has been here uttered was suggested by the conviction that too little investigation is being made, at the present day, into the etiology, pathology and therapeusis of fevers, which must continue hereafter, as in the past, to demand intelligent attention during most of the time spent at the bedside by the general practitioner.

2d. Our progress during the last half century in the study of the pathology of fevers has not been *pari passu* with our progress in study of genecology, ophthalmology, laryngology, or some other departments of special pathology. Yet the honor, glory and usefulness of the medical art must at least find their most comprehensive and potent vindication at the bedside of fever patients.

3d. If the effect of the utterances of this paper shall be to wake up any considerable number of the busy practitioners of Texas to the importance of the accurate study of every case of fever they are called on to treat, with a view to correct and minute diagnosis, which is essential to successful treatment, the time and labor employed in giving expression to them will be amply compensated for.

4th. After more than four decades devoted to the study of medicine, the writer is compelled to record his conviction that the literature of fevers is unsatisfying to a lover of scientific truth; and to express the regret that beyond the boundary of our knowledge of them there is an extensive field of the unknown, which, in this age of specialists, too few are zealous to explore.

The subject of fevers comprehends the whole field of pathology, and is too wide and too broad for cultivation for pecuniary profit, as compared with the small flower gardens in which specialism revels in luxurious ease and comparative intellectual indolence. Their therapeutics comprehends all of medical theory and medical art. The general practitioner, who gives earnest and intelligent attention to the study and treatment of fevers, and, day and night, from year to year, at the bedside vindicates the claim of scientific medicine to the confidence of the people, is a true representative of our humane profession.

NATURAL HISTORY OF CESTOIDEA.

C. M. RAMSDELL, A. M., M. D., LAMPASAS, TEXAS.

CESTOIDEA is a name given to a very large family of parasitical worms, some members or other of which infest individuals in all the grand divisions of the animal kingdom, beasts, birds, reptiles, batrachians, fishes and insects.

The whole cestoid family bear such a close resemblance one to another, and are so closely allied in their habits, manner of propagation and characteristics in general, that a careful study of even a few species will give a clear conception of the whole family, and enable one to recognize any member of it at a glance.

In the present paper, only those species will be discussed which are known to infest the human body. Before entering upon a description of the human entozoa of this family, I will give a brief account of its general characteristics.

As the name indicates, the cestoid is a thin, ribbon-shaped worm. That is to say, it has that form in the stage of complete sexual development, for it has three states of existence, and it is only in one of them that it bears any resemblance to a ribbon or tape. The egg is very minute, having a diameter of from one six-hundredth to one-thousandth of an inch, or about three to five times that of the human blood corpuscle.

In order to be hatched, this egg must be taken into the stomach of some living animal. Once there, the embryo quickly comes forth, a slender grub, microscopic in size, its head armed with a crown of hooks so arranged and of such shape that by alternately extending and retracting them, giving a motion somewhat similar to that of a man's arm in the act of swimming, the larva is able to force its way through the soft tissues into any part of the body. It frequently enters the veins and arteries, and is carried by the blood current into all parts of

the system, sometimes even into the brain and the eye. In this larval state the creature is without sex. When it reaches a place suitable for its purpose, it ceases its wanderings, burrows no further, but becomes encysted, assuming the form of a globule with a depression, at the bottom of which is the head. Squeezing the cyst will cause the head to protrude. Once encysted, the creature loses all power of locomotion, and remains for an indefinite period locked up in its prison. In this, the cystic stage of existence, it is as in the larval stage, without sex. Unless the cyst is taken into the stomach of some other animal, this is its last form, and it perishes along with the animal which it infests. If, however, the flesh, or whatever tissue it chances to be imbedded in, becomes the food of some carnivorous animal, the cyst wall is dissolved by the action of the digestive juices, and the cysticercus comes forth, once more endowed with powers of locomotion. It fastens itself by means of its hooks to the mucous membrane lining the intestinal canal, and takes on a new growth. The head protrudes from its cavity, the neck becomes elongated and wrinkled, and as the growth continues, transverse segments are formed, and in these segments are developed both male and female sexual organs. The cestoid is a true hermahprodite. The segments continue to increase in number and size, till, having reached maturity, they become detached and are passed out from the body, alone or mixed with the natural evacuations. When thus passed they are full of eggs, and even before they are detached from the main body the eggs are being extruded from the genital orifice of each segment in great numbers, so that they may be found at all times in the evacuations. Van Benedin has given to these segments the name proglottides, and by this appellation I shall hereafter designate them. Each proglottis is seen under the microscope to contain both ovaries and testicles, and in the fully developed ones the ovaries are filled with an almost innumerable multitude of eggs. The proglottis has the power of crawling about, of elongating and retracting itself, and if kept warm will retain its separate vitality for a considerable period of time, but it has not the power of putting forth new proglottides. This power seems to exist in the capital extremity alone.

The head, or scolex as it is called, is armed in most species, as before stated, with a crown of hooks. In many species these continue, but in some they are lost when the parasite enters upon its third stage of existence. The scolex is also provided with one or more suckers, through which it takes in nourishment, although it is probable that

after the worm has attained some length the proglottides absorb the juices from the intestinal tract directly. Although the proglottides fall off when mature, and although very large portions of the worm may be detached without destroying the scolex, yet there seems to be some kind of vital connection and some kind of circulation throughout the whole mass, as proven by one of the methods used for ridding the human body of this parasite. If the patient can be seen at a time when some portion of the tapeworm protrudes from the bowel, and a drop or two of hydrocyanic acid be injected by means of a hyperdermic needle into it, the whole worm is speedily killed, and it passes out of the system.

The eggs themselves are nearely indestructible, resisting the action of the most violent cheminal agents, very great extremes of heat and cold, retaining their vitality not for months and years only, but for centuries.

It is very often the case that the same animal harbors two species of cestoide at the same time, one of which belongs to it properly, attaining its full sexual development and producing its egg in it, and another which attains only cystic form, waiting till its host be devoured before reaching its perfect form. Such is the case with the rabbit, sheep, hog and others, and sometime with man. Of the cestoidea which infest man, there are three kinds, as distinguished by their relation to him. First, human cestoida, or those which first attain complete development in the intestines of man; second, temporary lodgers, those which reach only the second or cystic stage in man; and third, those which are found in man in all stages of being. Of the first division various authors name eight species, which are as follows: *Bothriocephalus latus* and *B. cordatus; Toeneo aconthotrias, T. eliptica, T. flavor puncta, T. lophosoma*, *T. nana*, and *T. mediocanellata.*

Of the second division, two species are known *cysticercus* of *Taenia marginata* or *tenuicollis,* and *Echinocorcus hominis*, which is the cysticercus of Taenia echinococcus of the dog. Of the third division, one species is mentioned, *Toenia solironi.* Among all these, only a few are common enough to deserve special mention in this article. The *Bothriocephalus latus*, or, as it is sometimes called, *Taenia lata*, or broad tape worm, is found only in Russia, Hungary and some parts of Switzerland. It receives its name from the fact that the proglittides are much wider than they are long. It differs from other species in having the genital orifice in the middle of the flat side of the segment,

rather than on the edge; in having a neck more slender and not wrinkled, the scolax long, slender, devoid of hooks, and furnished with but two suckers at its extremity. Its manner of transition from one stage to another is peculiar. Whereas, most species pass their second or cystic state in the tissue of some, the crysticercus of the *Tænia lata*, is an acquatic being. The egg having in some way been carried into the water, is there hatched, and the embryo developed something like celia, by means of which it swims about in the lake or pond till it is taken into the stomach, when it goes on and becomes a tapeworm; so that the first and last stages of its existence are passed in the human intestines, and the intermediate in the water. *Tænia nana* is found only on the northern coast of Africa.

Tænia Mediocanellata is the most common of all, and is met with in all parts of the world where the ox is found. In Abyssinia, where the eating of raw beef is universally practiced, nearly everybody has tapeworm, and the natives do not try to get rid of them, as they imagine them to be in some way conducive to good health. This worm closely resembles *Tænia Solium*, but the proglottides are thicker and proportionally longer, and the scolex is longer, devoid of hooks, is blunt or rounded, instead of being pointed at the extremity, and the suckers are larger. It has also some brownish spots of pigment scattered about the head, and the neck is smooth. The genital orifice is situated on the edge of the proglottis and is generally found on alternate edges of the several segments. The eggs, as measured directly by a fine micrometer, are one thousandth of an inch in diameter, spherical, and apparently incased in a hard shell. A friend of mine, an expert in the use of the microscope, confirmed my measurement. By another means of calculations, the diameter was estimated at one six hundredth of an inch. Taking this, the largest measurement, and consequently the one that would give the smallest number in a prescriped space, a single proglottis of the *Tænia mediocanellata* is found to contain not less than half a million of eggs On being subjected to slight pressure between glass slides, the eggs assume a curious cracked appearance, the fracture in nearly every instance taking cruciform shape, the lines radiating in four directions; but occasionally, one is seen having only three lines of fracture, as shown in the drawing. The most curious source whence man obtains the cysticercus of this species, is the flesh of *Bos taurus*, the domestic ox. When we take into consideration the amount of raw flesh which is consumed, in the shape of dried beef, Bologna sausage,

steak rare done, etc., and the remarkable fecundity of the parasite, a number of segments being thrown off daily, it is strange that so few cases of tape worm are met with.

The Tænia Echinococcus does not properly belong to man, but normally passes its larval and cystic states in the pig, and its sexual state in the dog; but sometimes the eggs find their way into the human stomach, and then almost irreparable mischief results. The eggs hatching, the larva make their way into the liver, the spleen or the omentum, and there form what are known as hydatid cysts. If large numbers of cysts are formed the victim dies a miserable death, from the destruction of the organs involved, and the incidental disturbance to the general system.

Sometimes, however, the cysts can be evacuated, and recovery ensues. The drawings show the forms taken by the parasite in man, in the pig, and in the dog. The habit which children—and even some women—have, of kissing dogs and fondling them, is a very dangerous one, as it often proves the means of introducing into the system the eggs of this much to be dreaded parasite. Hydatids are very common among the natives of Iceland, and the fact is easily accounted for by their keeping many dogs in their houses, mingling with them in a promiscuous manner. The native quacks, too, increase the trouble by giving as a cure for the malady pills made of dogs' excrement, no doubt on the principle of "*similia similibus cnrantur.*"

The cysticercus of *Tænia Tinuicollis* reaches its sexual stage in the lion, thus showing that man is the lion's natural prey. It is found in the intestines of man, and only in the cystic state. The best known of all is the *Tænia Solium.* It might very properly have been named *Tænia Humanis*, for it seems to be more at home in the human system than any other member of the Tænia family, as it is occasionally found there in all stages of development.

When the eggs are taken into the human stomach they hatch out, and the larva sometimes penetrate to the muscles, where they become encysted; sometimes to the liver, where they form hydatids, but more commonly they pass into the intestines and develop into tape-worms. As the specific name implies, but one worm is commonly found in an individual, all the rest perishing or being expelled while young. The usual habitat of the *cysticercus cellulosæ*, as the Tænia Solium is called in its second stage, is the flesh of the pig, of the sheep, and of the common rabbit. In the pig it gives rise to the disease known as measles,

the cysts causing a mottled appearance of the flesh. When the embryos lodge themselves in the muscles of man they are lost, unless their host become the prey of some cannibal, remaining encysted during the rest of the life of the individual. To the naked eye this species appears identical with *Tænia Mediocanellato*, but the proglottides are shorter and thinner, the head is smaller, pointed, and surrounded by a double circlet of hooks, and the suckers are smaller, and situated farther from the extremity of the scolex. The eggs in this species, also, are exceedingly numerous, amounting, in a single proglottis, according to some observers, to at least two hundred thousand. As the proglottides are produced very rapidly, the worm attaining a length of ten feet in six weeks, and as it is known to live for many years, the total number of eggs produced must be practically incalculable. The hooks drop off, in some cases, as the worm becomes old, one circlet of the double corona disappearing, and after some time the other. The parasite finally dies, and a spontaneous cure is effected. The *Tænia Solium* of man and *Tænia Marginata* of the dog are believed to be identical.

TYPHO-MALARIAL FEVER.

BY J. C. B. RENFRO, M. D., LAGRANGE, TEXAS.

THE above name is given to a fever which prevails more or less in all malarious regions. It seems to be a kind of amalgam fever or where malarial and typhoid fever prevail at the same time in the same patient, each fever running its course. The malarial fever predominates at the outset of the attack and afterwards the typhoid symptoms setting in. The malarial symptoms are generally of the remittent type: paroxysms every twenty-four or forty-eight hours. The typhoid symptoms are all those connected with typhoid fever, and sometimes throughout the disease there seems to be a commingling of the two diseases in the same patient at the same time. In those cases that prove fatal the same lesions are found as in true typhoid fever.

Those attacked with this fever usually commence with a chill followed with high fever; temperature running a high as 103° to 106° F., when after the usual period of from three to five hours the sweating stage sets in, followed by the usual symptoms of simple remittent fever, general malaise, bleeding at the nose, profuse perspiration, a lowering of the temperature down to almost normal. This condition may last for several days; paroxysms occurring every twenty-four or forty-eight hours, running the same course as before, until finally the typhoid symptoms predominate and run the usual course; there being a difference of one to three degrees of the temperature morning and evening, the evening being the highest. The tongue is usually heavily furred with tip and edges red. Sometimes the coating is slight with the papillæ projecting so that it resembles the strawberry tongue. The bowels at times are loose, at others constipated. The fœcal discharges are usually of a thin, dark color and offensive; more or less tympanites, in the latter stage of the disease, tenderness over the

bowels and gurgling about the illio coecal valve. Enlargement of the liver and spleen sometimes comes up during the course of the disease. Intense anorexia and a desire for cooling and acid drinks prevail throughout the disease. The appetite is usually very poor with a loathing for most all kinds of food. The urine very high colored, charged with bile, acids, and sometimes a trace of albumen in it. The cheeks always flush when the temperature begins to rise and will last until the temperature begins to fall or sink lower, and then the flush fades away, leaving the pale, sallow hue characteristic of true typhoid fever. As to diet, during the course of the disease, I usually recommend milk when it agrees with the patient; when this does not agree with them, oyster soup, or the concentrated essence of beef with soft-boiled eggs, etc. If there should be indications of asthenia or failure of the heart's action, I use alcoholic stimulants very freely, of which I prefer good, imported cognac brandy, and if necessary, combine same with carbonate of ammonia, and it may be necessary to use digitalis to strengthen and sustain the heart's action; at all events the diet should be mild and as easily digested as possible. Patient should be careful as to diet, etc.

PATHOLOGICAL CHARACTER AND CAUSATION.

This fever is due to poison known as malaria and the special cause of typhoid. It seems that these fevers follow in the wake of the malarial fevers and generally come up in the latter part of the summer and during the autumnal months. I think there is an atmospheric influence that breeds and develops these fevers. I have observed this phenomena since the year 1875, that when drouth prevails and the evaporation of moisture from the earth gets beyond a certain point these fevers develop, sometimes in their worst forms, amounting almost to an epidemic and malignant in their character, and vice versa, after an extended drouth, and then floods of rain saturating the earth thoroughly, that this fever also develops, and the malarial aspect of the disease is of more grave importance, requiring more prompt and energetic treatment to subdue it.

DIAGNOSIS.

"Typo-malarial fever is discriminated on the one hand from simple remittent fever by the characteristic events of typhoid fever, viz: the abdominal symptoms, the eruption in some cases, the earlier occurrence of ataxic phenominal epistaxis and occasional intestinal perforation.

It is discriminated on the other hand from unmixed typhoid fever by the characteristic events of periodical fever, viz: remissions, gastric symptoms, jaundice and the eventuation in some cases in intermittent fever." Topho-malarial, after the first few days, if proper treatment be applied, will run almost the usual course of true unmixed typhoid with this difference, however, on alternate days the temperature is almost always from one to two degrees F. higher, in true typhoid never. In typho-malarial fever the temperature is usually higher the first few days then sinks to a level with a gradual rise of from two to three degrees F. in the end of the second week, or beginning of the third, then it usually remains about the same for about one week, then a gradual decline until convalescence is fully established. The tongue will become clean, and resume its normal appearance, and convalescence ensues proper, unless a relapse should occur from some imprudence on the part of the patient. Sometimes the tongue will clean off and assume a glossy appearance; when this is the case convalescence will always be protracted. Sometimes it is almost impossible to diagnose a case of typho-malarial fever the first week of the disease. There is one point that I have noticed more particularly in typho-malarial fever, and that is a flacidity of the veins of the back of the hand with a purplish hue of same. In some cases the circulation and pulse are both depressed, and others the pulse is full and bounding. Coliquitive sweats appear in some cases, others the skin is dry and burning hot most of the time. In some case coliquitive diarrhœa prevails, in others cathartics and laxatives must be used.

PROGNOSIS.—In almost all cases where the complications are not too grave, the prognosis is favorable. I have noticed this, however; when there is a depression in the circulation and capillary congestion remaining for any length of time, pulse being low and the temperature running very high, and not an equal difference between the temperature and pulse, the prognosis is always grave in those cases; but under favorable circumstances, when there is no congestion of any internal organ early in the disease, no hemorrhage setting up from the bowels, and all the functions acting properly and evenly, running a regular course the prognosis is always favorable. A sudden fall of the temperature is always indicative of hemorrhage from the bowels. Coliquitive diarrhœa and sweats are also grave symptoms, as also petechia and echymosed spots on the cutaneous surface. Loathing of food during the entire course of the disease is also of grave importance;

while on the other hand, an appetite to take on some food every day is a very favorable condition, and is indicative that the patient is not likely to die of asthenia. Upon the whole, taken as a general rule, the prognosis with proper treatment is favorable. Bronchitis or pneumonia, setting up as a sequel, is also a very unfavorable phenomena. I have seen a very high state of inflammation of the bowels set in the tenth day, and terminate fatally in a few days afterwards.

TREATMENT.—I now approach a point wherein we may all differ in some degree, but I hope not materially. We may differ as to therapeutics in the choice of our remedies, as to which are the best, but in the main, if we understand the disease thoroughly, we will treat the disease similar. And first, as we have a mixed or two diseases to contend with in our patient, at the same time we must keep this in view; and as the malarial feature is predominant in the outset, I think the rational treatment would be, or is, to subdue all the malarial influence exerted on the economy, as far as we can, with the remedies usually used to subdue simple remittent fever, always keeping in view the condition of our patient and endeavor to irritate the bowels as little as possible. This I always do with broken doses of mercury until the secretions are thoroughly aroused, using some sedative mixture, say aconite fl. ext., one drop in water every hour until the remission occurs, then large and full doses of quinia sulph. until cinchonism is produced, then a quietus in the patient's condition is always produced, after which the typhoid symptoms will manifest themselves. I then change the treatment unless symptoms predominate demanding calomel and quinine. I seldom use it any more in the case. If pronounced intermissions should occur, we may try the quinine again, but usually it will be of little avail. It generally will produce gastric and intestinal irritation, which we should avoid as far as possible. I have myself thought quinia indicated in the latter course of the disease, and have given it, but most always with deleterious results to my patient; the next day the temperature rising higher by one or two degrees than before the administration of the drug. After the malaria is subdued in the system, but little medication is indicated usually; watch the patient closely, and the disease from localizing itself on any of the internal organs. I usually place my patients on a compound turpentine emulsion, consisting of

℞. Oleum Terebinth Fl., - - - - - ʒ ij.
Potassa Chlor, - - - - - - ʒ i.
Acid Hydrochloric, - - - - - M xxx
Pul. Gum Acac, - - - - - ʒ vi.
Aqua pura qs. to make a 6 oz. mixture.

Of this, give to an adult 1 tablespoonful every four hours. In the interim give 1 of Fl. ext. aconite every hour to control the circulation. Also,

℞. Sodæ Salicylate, - - - - - - ʒ vi.
Aqua Aromatica, Fl., - - - ℥ vi.

M. Sig. 1 tablespoonful every five hours.

The theory of this treatment is this: the emulsion keeps the secretions aroused, and the tongue seldom becomes dry. The salicylate of sodæ acts as an antipyretic, antiseptic and tonic, while the aconite controls the circulation. I seldom change this treatment throughout the typhoid stage; that is, generally. Of course complications sometimes come up calling for other remedies, such as too frequent stools coliquative sweats and asthenia. The first I usually control with

℞. Doveri Pul., - - - - - - grs. xx.
Bismuth Subnit., - - - - - grs. xl.

M. Ft. Chart No. iv.

Sig. 1 powder every four hours, as long as necessary.

The other two symptoms I usually control with alcoholic stimulants. Should hemorrhage occur from the bowels, it is usually easily controlled by Fl. Ext. Ergot and Bismuth, combined, or in conjunction, a few doses of which generally answers the purpose. Of course complications will sometimes come up calling for other remedies, of which we must be our own judge. In convalescence tinct. of bark, preparations of iron and a nourishing diet is indicated, and should be taken in moderation.

SULP. MAGNESIA THE BEST PURGATIVE TO REMOVE BILE FROM THE ALIMENTARY CANAL.

BY J. O. GIBSON, M. D., FOSTER, TEXAS.

FOR the last three or four years I have used sulph. mag. in bilious vomiting, or in any case where I had reason to believe an unusual quantity of bile had been poured into the alimentary canal, with more satisfactory results than by any other means of treating this distressing condition. It is a well-known fact that bile is an acid poison when present in the alimentary canal in unusual quantities, manifested by nausea vomiting and great prostration, as in bilious fever and black jaundice. Now the purgative that will remove the bile with the least disturbance is the one indicated. Purgatives that act by irritation are not suited, from the fact that they cannot well be brought in contact with the mucous membrane, on account of the abundance of bile and viscid mucous contained in the stomach and bowels. Sulph. mag. is a diluent and solvent of bile, therefore destroys its acridity and acts on the bowels by exosmosis, relieving the congested condition of the vicera, thereby appeasing the great thirst more effectually than ice water. The following cases will better illustrate its action:

September 17, 1882, about dusk a message requested me to visit a Mr. A. next morning, informing me at the same time that he was vomiting bile and had black jaundice. Prescribed a teaspoonful of E. salts in a glass of water and let him drink one-third of it every fifteen or twenty minutes, to be kept up until free purgation took place, then continued in less quantities until morning. September 18th, morning, I found him with all the symptoms of black jaundice, though he said he was better. He had vomited up the first two or three doses, as is sometimes the case, bowels moved several times during the night, thirst much less, ordered the salts kept up through that day and night until my return next morning. September 19th. Found him better in every

respect, urine lost its thick, bloody appearance, yellowness in eyes and skin gone; ordered quinine to be taken through the day; did not visit him again; made a good recovery. He afterwards told me that he suffered intense heat and thirst for ice water, that the salts soon relieved both; seemed somewhat offended with me because he thinks I experimented on him.

Second case, April 1, 1884. Called to see Mrs. Armenian, has been in America four or five months, living on the Brazos bottom since her arrival, age thirty-six, the mother of several children, well developed, eight months gone in pregnancy; saw her at 2 o'clock p. m., been sick two days and nights, eyes and skin jaundice, very restless, fever and great thirst, had vomited bile several times, nauseated more or less all the time, urine scanty, thick and high colored, but not bloody-looking. She attributed her attack to shock caused by sudden falling of a sash near her; had not slept a good nap since first attack; yellowness in the eyes was noticed at the beginning of the attack. Prescribed E. salts as in the preceding case; saw her at 6 o'clock, had several very bilious actions from the salts; says she feels better, slept some, all the symptoms better; ordered salts continued through night. Morning second. Salts moved the bowels several times; says she is hot; fever more than evening before; thirsty; has had no salts since midnight; ordered salts continued through the day. Evening better; salts continued to act through the day, very bilious, urine better; put her slightly under the influence of morphine and left her with no medicine to take through the night. Morning third. Slept well, says she is well; ordered 10 grs. quinine, in three doses, to be taken through the day. Evening doing well.

BLOOD-LETTING.

BY J. S. SAUNDERS, M. D., BONHAM, TEXAS.

IS it true, as my great master, Prof. S. D. Gross, says, that "venesection is about to become a lost art?"

I refer to the operation of blood-letting, general and local.

The beginning of this practice dates back even to a time long anterior to the inception of medicine as a science; to a time, as the lawyers say, "beyond which the memory of man runneth not to the contrary." The negroes of Guinea, the Hindoos, Scythians and Chinese, all practiced this art as a remedial measure. Farther on, Greek, Roman, in fact, physicians of every age, clime and country had much confidence in and freely used this remedy, till we come to our own time—the last quarter of a century, or a little more. In the recollection of many members of the profession, now living, this great change in our practice has occurred. Thirty-five years ago no doctor would have thought of starting out to practice without a full supply of lancets, scarificators and cupping glasses. Now, how rarely do we find anything of the kind in any doctor's outfit?

At that time, should some one get a fall and be so much shocked as to scare somebody, the doctor that happened to be near and was not prepared to bleed, and that promptly, would get the reputation in that country of being unreliable in an emergency, and hence not to be depended upon. Now, should a necessity for the operation arise, and twenty doctors be present, it is doubtful whether any one of them would have a lancet. Formerly the average doctor would, in some form or other, bleed for the relief of almost every ailment that humanity is heir to. And so thoroughly were the masses of the laity indoctrinated into the importance of this practice that many of them, having an eye to business, would get the neighborhood bleeder, monthly, semi-annually

or annually, as the case might be, to bleed them, that their blood might be "renewed," and disease warded off, and the approach of old age retarded. These bleeders were often called upon to practice their art one or more times before the doctor was called. Whatever gets to be too common gets to be contemptible. Hence, when we see the abominable and ruinous results from the foolish and indiscriminate use of this remedy, there is a proneness to fall into the other extreme—in avoiding "Scyllae we fall on Charybdis." The folly of this ruinous practice, of this indiscriminate use of so potent an agent, is manifest; but have we not leaned a little too far the other way? Our best thinkers and writers teach now, and have all the time taught, that congestions and acute inflammations of vital organs, threatening life, may be more promptly relieved by lessening the amount of blood than in any other way. It is now, I think, well understood that there are a few cases of sthenic, plethoric, congested, concussed, or actively inflamed states of vital organs, though but few, that should be bled, and that promptly. But I am not proposing to discuss the question—is it proper, under any circumstances, to bleed? for that would be to discuss a question that is self-evident, in the light of science of to-day.

But somehow, it has come to be unfashionable to bleed; and that we are sometimes too much controlled by popular opinion, for now the popular clamor is as strong against the use of the lancet as it was foolishly clamorous for it a few years ago. We all, and especially the younger members of the profession, have to pander more or less to the caprices of the patient and his friends—we must be careful how we ignore "Aunt Sophy, Uncle Jake and Granny Jones"—lest when we are gone they will call in Dr. Bogardus, who will most likely tell them that it was lucky for the patient; that he barely arrived in time to save him. One time "Granny" said to me, "My God, Doc., are you going to bleed the woman to death?" I hope none will be deterred from doing what ought to be done because the thing to be done may be unpopular; better have the approval of your own conscience than the approbation of all the aunts, uncles and grannies of the land. My sole object in writing is to call the attention of my brethren to the fact that we are in imminent danger of losing the most potent means of relieving suffering humanity in some cases. Could I flatter myself that I had successfully done this, then my whole object would have been accomplished. Whoever thinks this (Danger of a "lost art") all imaginary, let him ask himself how many times during the last twenty years he has heard, in

consultation, the question of bloodletting discussed, and how many times during the same period of time he had seen active depletion reported in the treatment of any case in any of our journals? When he shall have answered these questions, he will be convinced there is danger the art will be lost. But let no one think for a moment that I would favor the revival of the abominable—shall I say, habit?—of bleeding everybody for every ache or pain. It were better that we bleed not at all than do that way; better that two should die because we did not bleed, than that one should pass away because we did. I occasionally—semi-occasionally would perhaps be the better word—meet with a case of imminent danger from cerebral congestion, or concussion, pulmory or cardiac engorgement, great plethora, etc. In these cases, however rare, when they do occur I like to bleed, and I do it. Who does not sometimes meet them? When they do occur I earnestly submit that when we shall have tried a more conservative course, viz: Use of salines, ipecac, tart. em., veratrum, aconite, etc. By that time our patient will have slipped through our hands and the most efficient remedy has not been tried. I illustrate by reporting from memory the following case:

Mr. H., white, about thirty-five years old, robust, muscular, full habit, married, by occupation a farmer, lately an immigrant to Texas, from Illinois. In November '77 went alone to fell a tree with an axe, and was found some hours afterward where he had felled the tree with the left leg fractured. The fracture was simple. My friend, Dr. Wells, now of Lampasas, then of Fannin county, was called in, who adjusted the fracture and dressed the limb, I have no doubt, properly and skillfully. There appearing nothing about the case unusual at this time, the doctor of course returned home.

A few hours later he was summoned to see his patient again, the message being that he was becoming stupid. At this time I was requested to meet the doctor in consultation.

My son, Dr. Bacon Saunders, just then beginning the practice, was with us and took part in our consultation. Six o'clock p. m., patient is in complete stupor, slow, stertorous breathing, full, slow pulse (50) and wholly unconscious. After diligent search we could find no outward sign of other injury than that of the fractured limb. All agreed that in some way the brain was concussed and the man was about to die from resulting confusion. I suggested that bleeding to an extent sufficient to soften the pulse, without any regard to the amount of blood

taken, was the only remedy that promised anything. The younger doctors seemed rather reluctant, but agreed, provided that I would operate. It turned out there was not a lancet among us, but I substituted a common bistoury, and opened a free orifice. We took at least two and a half pounds before the pulse became materially softened. We prescribed some sedative to be taken, if he could swallow it, and left him for the night. Early the next morning he was reported partially conscious—had spoken some. Doctor B. S., my son, went out and assisted doctor W. in redressing the limb, this time using the plaster paris dressing. From this time on there was no untoward symptom, and the man is now well and a valuable citizen of the county.

To recapitulate—Sometimes we have patients that ought to be bled. When we meet one of these, whether once in a year, or once in a lifetime, if we fail to do it, and the patient slips through our hands, let it be remembered that we have failed to use confessedly the most potent means of relief. If we fail to discover the conditions that make up the case, be it understood that we are nevertheless culpable. Or if we fai to do our whole duty in such an emergency on account of fear of popular prejudice, we are still more culpable. I have rarely resorted to venesection without entire satisfaction, at least to myself.

HOT WATER IN "HEART FAILURE."

BY C. R. JOHNSON, M. D., ATHENS, TEXAS.

SEPTEMBER 4th, 1883, I was summoned to attend Mrs. A., about 47 years of age, the messenger urging me to hurry, and stating that she was crazy. On my arrival found her raging desperately, trying to fight those about her, who had to hold her on the bed, and at times thrusting her fingers into her mouth, trying to pull out her teeth. I was told that, some four hours before, she had four or five teeth extracted, the pulling of one of which caused a very sharp, darting pain in the left ear, of which she complained up to the time of the onset of this wild paroxysm. Her pulse was good and normal. Knowing Mrs. A. to be of a very hysterical temperament, and believing that the pain was the exciting cause of the attack, which I thought nervous and reflex, I at once administered, hypodermically, about one-fifth of a grain of the sulphate of morphine. Waiting half an hour, and there being no change, I gave, per orum, fifteen grains of chloral hydrate; and in fifteen minutes repeated the chloral, giving ten grains (the chloral was weighed). In about fifteen or twenty minutes after giving the second dose of chloral my patient became relaxed and quiet. In a few seconds the face became livid, the ears were almost black, and the blood seemed as if settling in the neck, in spots; the respiration stopped, and I could detect no pulsation. In fact, she seemed in *articulo mortis*. I at once applied aqua ammonia to the nostrils, and practiced artificial respiration; attempted to get some brandy down the throat; the power of deglutition was lost, however, and I failed utterly to get any swallowed.

I now remembered having somewhere read an article on the use of boiling hot water in chloroform poisoning, and the consequent syncope. The water was fortunately at hand, boiling on the stove, and, though I thought my patient dead, I at once dipped into it a towel, and wadding it up, scalding my hands, placed it over the heart. In a few seconds I

re-dipped and again applied it. At once, as if by magic, signs of life began to appear, and it was but a few moments till Mrs. A. was breathing naturally, and the pulse was regular and normal. She was now perfectly rational and quiet, and with the exception of a slight nausea, which lasted three or four hours, had no further trouble.

I have since examined Mrs. A.'s heart carefully, and could detect no organic trouble.

It is a matter of little moment whether it was, in this case, the chloral alone, or the combined action of it and the morphia which produced the heart failure; the fact still remains that it was produced, and that the hot water, by its sudden and powerful revulsive action, again set going the machinery which had stopped.

I have been led to report this case because of the increasing and reckless use of this potent but uncertain drug, both by the profession and the laity. And while I am well aware that one or two isolated cases prove but little, yet I know that the water, which, let me impress upon you, must be boiling hot, saved the life of my patient, and that in like cases it well deserves at your hands a trial.

Dr. Ernest Labbe, in his critical review on chloral, says that "large doses retard the action of the heart and afterward arrest it in diastole." "Liebreick, and a majority of writers, admit that it acts on the innervation of the heart, which it abolishes."

Dr. Labbe says: "We should never exceed 70 to 90 grains, although 150 have been given with impunity." Yet, while by no means setting myself up against such authority, I would, as a warning, in addition to the case which I have had the honor to report, call to your minds the untimely death of the late Dr. L. P. Yandell, and the case of the patient which, but a few hours before his own death, he reported to a friend, in all three of which the dose was far less than that allowed by Dr. Labbe.

Be cautious, then, gentlemen, in your use of chloral, especially of American manufacture, which is far too often impure. And in case the trouble meets you which confronted me, do not forget the boiling hot water, and use it unsparingly, though as certainly it will blister the surface.

PROLONGED CASE OF VOMITING.

BY R. G. WILLIAMS, M. D., WHITNEY, TEXAS.

MRS. B., aged 27, nine years married, large, stout and the picture of apparent perfect health. Mother of two living children, two dead; is now, January 21st, 1884, two months enciente.

Has had trouble from vomiting in the early months of pregnancy in the four previous gestations, but not sufficiently so as to create any interference with general domestic duties.

On January 21st was called to see her to relieve vomiting, which had come on the day previous, and had continued almost constantly. I ordered small doses of calomel and bismuth in combination, to be administered every two hours. After the fifth dose the bowels moved well, the vomiting ceased and she made a visit into a neighboring county, returning on the fourth day. So soon as she reached home she was again taken with severe vomiting. This continuing, I was again called in, and again ordered the calomel and bismuth. This moved the bowels, as before, but seemed to only increase the vomiting. The stomach would retain nothing, medicines, fluids nor solids.

Mustard poultices over stomach were often used, bits of pounded ice allowed to dissolve in mouth, then very hot water was tried. Then the much-vaunted popcorn treatment had a fair trial. Then creosote, oxalate cerium and ipecac, then tinct. iodine, carbolic acid, gum acacia, then infusion calumbo and infusion senna, ginger and calumbo, camphor, peppermint and lime water, bicarb potassium in peppermint water, lime and milk, hydrate chloral, per mouth and per rectum, morphia dry on tongue and hypodermically, and chloroform by inhalation. Champagne, brandy and Appolinaris water were each tried and abandoned.

I now determined to make vaginal examination, expecting to find ulceration. Had ready a gr. x to the ℥, solution of silver nitrate.

To the touch, found the womb much lower than it should be, then introduced speculum and found no ulceration. Could not resist, however, temptation to brush over lips of os the silver solution. Then had her to assume the knee and elbow position, and readily pushed the organ to its natural position.

All this, however, made no perceptible change in the vomiting, and the pushing up of the womb was of only momentary benefit, for twelve hours afterward I made another vaginal examination by touch, and found the womb low down, as before. I now began the use of large quantities of carbolised, very hot water, as a vaginal douche, and by request of husband, I applied a blister to epigastrium. Cloths wrung out in cold water were often applied to lower bowels, but when pain was severe, flannels rung out in very hot water were substituted.

I remember having, some years ago, a veritable case of hysteria. There was persistent vomiting; I could not stop it; I tried many remedies; used chloral and morphia heroically. Finally, the lady asked me to prescribe buttermilk. I did not take to the idea, but finally consented, and to my amazement the buttermilk acted beyond all expectation, the vomiting ceased at once and my case made a speedy recovery I concluded to try the buttermilk in the present case, but in this instance it was a signal failure.

The vomiting continued; there was more or less pain in head, inexpressible uneasiness in stomach, and at times these pains would extend to hypogastric regions, and more than once I looked for abortion.

The vomited matter at times contained bile, but most frequently it was of a glairy, viscid nature. The eructations were so decidedly acid that she complained greatly of a hot, burning sensation in throat and along the æsophagus.

The urine was examined for albumen and for sugar. Neither of these were present, but there was present an excess of urate of lime and soda.

My case craving something sour, I thought to follow the teachings of nature, and ordered acid muriated qtts. v., pepsin grs. v. in water, but I soon found this only increased the acid eructations. As the case seemed worse from 1 p. m. to 11 p. m , I thought to try quinine in gr. xv. doses per rectum once per day. Several doses were given, and no benefit. Bromide potassium was tried per mouth and per rectum, without any sensible relief. Morphia, hypodermically, seemed the only medicine which afforded even temporary relief. Large doses

were used; beginning with the gr. 1-6, it was rapidly increased to gr. ½. In the large size dose, quietude, a kind of trance, was induced, but no sleep. The morphia would ease all pain, but efforts at vomiting were continued. She would go through the motion of vomiting, and would occasionally throw off a viscid fluid.

To aid the morphia I forbid all food by the mouth, feeding my case on concentrated broths and sweet milk per rectum.

These were well retained and this treatment continued forty-eight hours without, however, any apparent improvement; then by entreaty of the case they were discontinued.

I had continued the morphia hypodermically through a period of four or five days, and when under its influence would rest quietly, but could obtain no sleep. She had probably twenty hypodermic injections of morphia and at no time, even from half-grain doses, could I perceive its toxic effects, not so much as contraction of pupils.

It would produce great cutaneous irritation, manifested by continued itchings, and would cause a deep blush over entire face, with hot flushes over entire body, and would at times cause her to feel as though she was all "a-fire," "burning up," and said she knew she had high fever, but at these times, previous and subsequently, the use of thermometer indicated little if any unnatural heat. Thermometer ranged from 97½ to 99½ °, most frequently it was 98¾. Pulse usually slow—68 beats, but after prolonged attacks at vomiting it would rise to 120.

Having no permanent benefit from morphia, hypodermically, I concluded to abandon its use, but then what next to do was the rub. I concluded to place my case upon a very simple treatment, as follows, viz:

℞. Bismuth Subnit.
Husband's Magnesia.
Pepsine, - - - - - - - aa ʒ i
Ar. Spts. Ammo., - - - - - - ℥ i
Syr. Simplex.
Aqua Dest., - - - - - - aa ℥ iss m.

Sig. Teaspoonful every four hours. Also:

℞. To opii. deodorized, gts. x., every four hours, alternately with the first.

Knowing this treatment to be in nowise superior to my others previously used, I determined to bring to bear upon my case all my poor powers of eloquence. I persuaded her to think she was really better

than at any time of her sickness, and now with the aid of the present medicines I had no doubt of an immediate change for the better. I so impressed this upon her mind, that half an hour afterwards, her husband coming in, she told him she was surely feeling better, and believed she was now on the high road to recovery. This was about 6 p. m. of the 29th day of her sickness.

Wonderful to relate she at once passed off into a quiet slumber, which lasted five or six hours. When she awoke and made efforts at vomiting, failing, and her husband reassuring her, I had made him a party to my desires in thus working upon her mind, she again passed into a sweet slumber, and awaking next morning called for toast and a roasted Irish potato, which was retained. From this time on she rapidly improved, vomiting ceased, her appetite returned and in a day or two she was so far recovered as to enjoy short buggy rides. She is now, March 3d, four miles out in the country, among friends and heartily enjoying her three meals a day.

Now I would ask was there hysteria complicating this pregnancy? or did the vomiting cease because the womb had lost its irritative features? or was it the impression made upon the mind? I cannot attribute her recovery to the last medicines used, for these were in nowise superior to others used.

My only desire in presenting this case is that younger members may not, in similar cases, too soon become disheartened. I must admit this case gave me great anxiety and much trouble. I believe that cases of a like nature may at times end spontaneously and recover almost suddenly. I must admit I was greatly pleased at the almost sudden favorable turn in all the symptoms of my case.

ALCOHOL A POISON.

BY J. C. MILNER, M. D., GAINESVILLE, TEXAS.

NOT to be found in nature, but made by the ingenuity of man,—hence an artificial production; and, next to water, a fluid that enters as a daily beverage of an immense number of civilized people, in its persistent use it is a producer of disease and death. We, as active practitioners of our noble calling, in our rounds of day by day labor, are often called upon to treat some of the most fatal and terrible diseases, the origin of which has been in the persistent use of alcohol. Reasoning from cause to effect, and studying from a physiological standpoint, I find no place for alcohol as a necessity of life. In its action on living functions it supplies no new force, it creates no new matter, of natural character, to build up disorganized tissue. It is a universal intoxicant. In the lower animals it will produce the most grotesque actions, and in the higher order of animal, man, it is capable of inducing the most systematic phenomena of disease. The first symptom of moment that attracts the attention after a dose of alcohol has been taken, is an increased vascular excitement, a quicker pulse-rate. According to the observations of Dr. Parks, and the late Count Wollowicz, as calculated from eight observations made by them, the average number of beats of the heart in 24 hours, under what they denominate the water period, or without any alcohol, is 106,000. In the first alcohol period it rose to 127,000, or 21,000 more; and in a later stage to 131,000, or 25,000 more; and on the 12th day, with six fluid ounces of alcohol, it rose to 30,672 times more. It is difficult to realize the immense amount of work performed by the heart under this extreme excitement. No wonder, after this wonderful labor, the heart should flag; and shall we be surprised that the muscles are weak, or that the brain should languish? No, verily, but rather be surprised that the organism can withstand such a pressure. Under these terrific impulses

of the heart the peripheral circulation is quickened, the vessels are distended and engorged. This condition is general; the brain, the stomach the spinal cord, the lungs, the kidneys, or any other vascular organ, it they could be immediately brought into view, the engorgement would be manifest. The minute vessels, throughout the organism, have lost their contractile force, by the effects of the alcohol upon the organic nervous centers. Thus partially paralysed, they offer insufficient resistance to the force of the heart, whose impulses are quickened, dilating more and more the feebly resisting vessels, giving evidence, not o increased vital force, but of wasted power. Still, carry the effects o alcohol further, and the cerebro spinal nervous system will becomef involved, as is evidenced by the inability of co-ordination of muscular movements. The steps will be irregular; the muscles failing in power as they come more and more under the depressing influence of the paralyzing agent. Push the agent still further, and the centers of thought and volition will become unbalanced, thrown into chaos; the mind loses its equilibrium; the intellect gives way to the emotional, or organic. Reason is dethroned, and all the animal instincts are manifested. The emotional faculties get in wild disorder, extending to tears or laughter, praying or cursing, until the senses fail, and the subject sinks into insensible sleep and utter muscular prostration. We stated that it supplied no new force or created no new matter, and now we say it is a destroyer of the vital forces, as is evidenced by the fall of temperature; the chilliness which the man feels who has indulged too freely in alcohol, as he becomes sober, is suggestive evidence of this kind. The fact that alcohol, taken into the body, reduces the temperature, is sufficiently shown by the experience of travelers in the Arctic region, by the Napoleonic campaigners of Russia, and by the Monks of St. Bernard, who all testify that death from cold is hastened by its ally, alcohol. Evidently the physiological conclusion is, that it is a narcotic, and that it does not supply vital heats, as is so commonly supposed by those who must take "just a drop, to keep out the cold"

Let us grasp the physiological fact, that what we have been educated to believe was stimulation is but a relaxation, or partial paralysis, of one of the most important mechanisms in the animal body—I mean the minute resisting circulation of capillaries. Then we will understand why all excitement leaves its corresponding depression. It is said that "a little wine cheers the spirits," "and to take a little for the stomach's sake" will do good. Would it be just to admit that, when we have so clearly

shown that the corresponding depression is the result of loss of the vital force? The eliminating powers of some systems are so great that the effects of the alcohol is not so readily felt as it is in others, where it is accumulative. We hear some say that it gives strength, and that they are kept up by stimulants, when, really, they are kept down; for the sensation derived from the immediate action of alcohol deceives them, and they attribute that to be good which is sapping their vital forces.

If potential strength is given to brain or muscle by its use, why are those who are habitual drinkers continually demanding more and more? Just as the organs of the body may be brought to tolerate large quantities of opium, so may the system be brought to a state of adaptation to receive and dispose of large quantities of alcohol. But in the very preparation of adaptation they are undergoing physical changes tending to the destruction of their functions, and to a perversion of their structure. We recognize this in the diseases occurring from its use, a few of which we will call attention to without entering into an elaborate discussion.

First we notice the habit of indulging; it creates a functional disturbance, restlessness of mind, unrefreshing sleep, loss of appetite, and as the day advances, a languid condition of mind and body, a sensation of wanting something to appease and satisfy this unsettled condition. Under this apparent necessity, created by this desire, some alcohol is taken, and relief for the time is obtained. I say for the time, for the effect is but transitory, until all the above functional troubles are renewed, plus some organic lesion in a change of function or structure of some organ.

This is evidenced in the disturbed secretions of the kidneys—one day a copious discharge of a limpid, colorless fluid; the next perhaps loaded with a dense deposit. The stomach and alimentary canal distended with gases, and flatulency a continued annoyance. Here we have alcoholic dyspepsia, the man reaping some of the first fruits of dissipation. Alcohol has such an affinity for water that it demands that fluid, though it permeates every tissue of the body. The subject now has another trouble added, which is thirst. To gratify this demand within the twenty-four hours, from four to five times as much fluid, either in porter, ale, beer, wine, cider, water or whisky will be taken than is required for health. The body is forced to dispose of that surplus. Will it not deteriorate under it?

The warm summer days supply, to some extent, the wasted heat. The relaxed vessels are ready to give way under but slight pressure. Autumn is dreary and winter depressing, and with the cold winds of spring comes the neuralgia, gout or rheumatism, according to the diathesis. I ask, has the body deteriorated? The physician detects the sorrow, the troubling muscle, the feeble pulse, the cold, clammy skin, the white, coated tongue, the powerless heart.

The alcoholic constitution of the body is formed, upon which is readily grafted organic diseases. A degeneration of the muscular fibres of the heart, an interposition of fatty matter within the fibres, are some of the changes taking place in the heart. It looses power to propel the blood through the partially paralyzed vessels; the arterial recoil is weakened, the heart ceases to respond to the agent who has worked, or is working, its destruction. The same effects upon the heart are transmitted to the blood vessels. The minute capillary network lying between the arterial trunks, and returning veins, which are so active in the process of nutrition during health, is perhaps where the first deteriorating effect is felt. If we trace the course of the modification of disease upon these vessels, we enter upon the study of the disease of the organs through which they ramify.

It is known one of the physiological distinctions of the liver is to hold in its cellular structure the drugs arsenic, strychnia, etc. So it does alcohol. The confirmed drunkard's liver is, perhaps, never free from it. The organ is first congested, then enlarged from a thickening of tissue. After a time atrophy will follow, and with it dropsical effusions, because of obstructions to the returning blood. In vain we may apply our remedies, for the handwriting is seen upon the wall. If the theory that natural sleep is produced by a contraction of the minute blood vessels of the brain, and thus extruding blood from the brain, be correct, we know why the drunkard is troubled with "insomnia," the propelling power of the heart sending the blood to the brain, producing an engorged condition approximating that of apoplexy. The effect of the alcohol is to maintain this relaxed state of the vessels, thus keeping them charged with blood, preventing the natural sleep.

These abnormal effects upon the brain and spinal cord can but produce organic deterioration—the membranes thickening, the blood vessels are subject to structural changes, the true nervous matter is modified by softening of texture or by change in cellular structure. These changes oftimes develop the worst forms of nervous diseases,

either in epileptic spasm, paralysis, or that in insatiable craving for more, to which we give the name of "dypsomania."

In this condition is developed a mixed trait of madness and sanity. The poison, operating upon the organic centers, has created the emotional thirst for more, until a reckless, maddening desire, uncontrolled by the powers of the will, is engendered. The subject would sell his birth-right for alcohol, and finally sinks into the alcoholic condition, "mania-a-potu." Certain of the brain centers are paralyzed, and with the brain power of self-control broken, the subject is indeed a maniac, with all the extremes of animal passions intensified by the conjured-up horrors of morbidness, becoming realities to the sufferer.

This picture is not too graphically drawn, and if the effects ceased with the adult, it would be bad indeed; but not so, it is transmitted to posterity, to innocence in utero. There are things "in heaven above, and on the earth beneath," I can't explain; yet I believe, because of the inscrutable facts, none, more in nature, than "physical vices like physical virtues," descend in line.

HYPODERMIC USE OF BICROMATE QUININE AND UREA, ETC.

BY R. P. TALLEY, M. D., BELTON, TEXAS.

IN 1867, August 3, I made my first professional visit in Texas. It will long be remembered that in 1866-'7-'8-'9 almost our whole population suffered fearfully from malarial diseases, and especially from what was known among the laity as "Black Jaundice," which physicians now call "malarial hæmaturia." The practice where I was then located was fearfully routine. Quinine, calomel and purgatives in almost every case. A man knew about as well what would be his treatment before he saw his patient as he did afterwards. The laity believe so much in purgatives (pills), and especially some form of mercury that if they could not get them any other way, they would take some in spite of the doctor. I noticed in such practice a great difficulty in getting any effect from quinine, especially for several days in the beginning of the treatment of cases of any severity. I was told by some professional friends and also read from some medical literature that the system must be first prepared for the quinine by the use of mercury, purgatives, etc. And again from the same source of information it was urged that if quinine passed through the stomach it would likely get entangled in mucous, etc., and not be absorbed. All of this I found, after some trial, did not give me any satisfactory information on the subject. I found that in many cases my patients would not complain of the characterestic effects of quinine until after three or four days' treatment, or in other words after convalescence had in fact set in, notwithstanding the daily rations of the drug. On one occasion several years ago I was called to an orphan negro boy, who was very sick with remittent fever. He had no friends to give or even urge me to give the traditional mercury and purgatives, etc. I concluded to give him 10 grains quinine, made into pills with Aro. Sulph. acid every morning. This was continued for three days with all the fluids and

nourishment he could be induced to take. He improved every day and on the evening of the third day I gave him a full dose of castor oil, which did not move his bowels for about twelve hours, the actions from which were saved for the "doctor to look at." I of course examined them carefully, and to my surprise, found eight of the twelve pills of quinine that he had taken during the last three days. I have frequently found similar cases since. Not long ago I gave a child about ten years old, quinine capsules—the quinine made into mass with citric acid—from Wednesday until Saturday. She improved every day, and on Saturday morning I examined a spontaneous action from her bowels, the first while taking the quinine, and found several doses of the quinine, the capsules gone, but the quinine not perceptibly less than when put into the capsules, as one of our druggists in this place can to-day testify. This experience, and that of frequently finding patients who would only speak of the characteristic effects of quinine after taking it for from three to five days, either in powder, pill or capsules, has given me a great deal of trouble in the practice of medicine here, where we have so many malarial diseases to contend with, especially since I am a firm believer in the doctrine that quinine is the best anti-pyretic known to our profession, as well as that it is the best specific in all troubles even near akin to malarious affections. Therefore I have been studying and watching medical literature the very best I could, for a number of years, for some preparation of quinia that could be used efficiently with the hypodermic syringe. Formula upon formula has been published for years, for preparing the various preparations of quinia for hypodermic use, but all of them (with one exception) are so defective, for reasons not here necessary to give, that I have only used them as a last resort, notwithstanding the medical literature, as well as my experience in regard to their use, are very encouraging in many repects.

About two years ago I read in Prof. Bartholow's third edition of "Hypodermic Medication," as follows to-wit: "Very recently a new compound salt of quinia has been introduced for hypodermic injection, and it seems to possess very distinct advantages over all other preparations hitherto proposed. It has been termed *quinia bimuriatica carbonidata*, and it is formed by Drygen, from a combination of twenty parts of muriate of quinia, twelve parts of muriatic acid, and three parts of urea. The resulting salt is soluble in equal parts of water." (Quoted in the Medical Times and Gazette, July 12, 1879.)

He further says: "The trials that have been made of it at Hamburg have proved so successful that it is highly desirable it should be known more widely. A 50 per cent. solution has always been employed, and the quantity injected has varied from a half to three syringe-fulls. The local irritation was, in most cases *very slight*, and at the *worst* consisted in a circumscribed burning pain, *without redness* or *swelling*." When I first read this, I felt like I had captured a prize, the value of which, in the practice of medicine, could not be over estimated. I immediately ordered a small quantity from Messrs. John Wyeth & Bro., through Messrs. T. E. Smith & Bro., of Belton. After waiting several weeks I found that Wyeth Bros. had simply paid no attention to the order. I then wrote them in regard to the drug myself, and still, after several week's waiting got no answer. I then wrote to Prof. Bartholow to know where I could get a small quantity of the drug, and that I had written Wyeth & Bro., and had got no answer. Prof. Bartholow promptly answered that Wyeth & Bro. made it, and that perhaps I did not enclose a stamp for reply. I then wrote across Prof. B's. letter to me an order for a small quantity, enclosed two postage stamps and got Messrs. T. E. Smith & Bro. to vouch for the pay. In due time I received by mail ʒj, charges $1.25. From then until now I have managed to always have some of this preparation on hand. About a year ago I wrote to Prof. Bartholow for reference to any literature on its use except what was in his third edition on "Hypodermic Medication." He answered that, "I know of no literature on the hypodermic use of *quinia bimuriatica carbonidata* except what is contained in my fourth edition of Hypodermic Medication." It may be that he wanted to sell his book, because, when I got his fourth edition, I found that it contained precisely the same and nothing more on the subject than the third edition does. I then wrote to Wyeth & Bro. to please give me the difference in the chemical composition of sulph. quinia and bimuriate of quinia and urea, an easier name for Q. D. C., especially in regard to the amount of quinia contained in each. These gentlemen replied as follows:

PHILADELPHIA, March 8, 1884.

Dr. R. P. Talley, Belton, Texas:

DEAR SIR:—Your esteemed favor came duly to hand, and in reply, permit us to say that the salt in question (bimuriate of quinia and urea) has been extensively used of late in Philadelphia and its vicinity. There have been so many formulæ given, that for the present, we prefer to withhold any comment on them. We herewith hand you an extract taken from the Druggists' Circular in relation to the preparation. We

take pleasure in handing you the formulæ, showing the different amounts of quinia in each preparation—of *sulphate and muriate of quinine*, viz:

Sulphate of Quinine,=Alkaloid, - - 73.134.
Bimuriate of Quinine and Urea,=Alkaloid, - 61.36.

About this percentage.

Please excuse the delay in answering you communication, as it was accidentally overlooked. Hoping the above will be what you desire, we remain,

Yours truly, JOHN WYETH & BRO.

So we see that the new preparation contains a little less of the Alkaloid than the sulph. of quinine does. Since getting this letter, in using the new preparation, I know more about what I am doing. While the above detail is too tedious for a meeting like this, it goes to show *some* of the troubles we have to encounter in the practice of medicine. I will now give some of my experience in the use of this new preparation of quinia.

I treated my first case October 1, 1882, which was a boy about eight years old, who had been sick two days with remittent malarial fever when I first saw him. I found his temperature 105½, pulse 120, respiration 30 to 35, vomiting every few minutes, cold extremities and almost complete coma with twitching of the muscles of the right side. Bowels had been moved with "Simmons' Liver Regulator," and had had several domestic doses of blue mass and quinine for two days. I gave, at about 10 a. m., hypodermically, sulph. morphia, gr. ⅛; sulph. atropia, gr. 1-100; bimuriate of quinine and urea, gr. x., in water m. x.; ordered warm sponge bath to whole surface of the body, and for him to have all the iced lemonade he could be induced to take. At 6 p. m. temperature 102 and a corresponding improvement in every other respect. Did not vomit after the injection and drank freely of the lemonade. He convalesced favorably and rapidly without any other drugging at all, and so far as I know did not relapse as is so often the case in such diseases.

SECOND CASE.—On Sunday, November 5, 1882, about 2 o'clock p. m., I saw Mrs. I. at request of her husband, from whom I got substantially the following history, which I regarded as about correct, inasmuch as he had had about ten years' experience in a retail drug store: On Thursday and Friday before, patient had a chill, followed by fever and sweating, as in ordinary intermittent malarial fever. On Saturday before, she seemed a little delirious, but took some nourishment in the morning, as on the two days previous. But soon in the afternoon fell

from her chair in a spasm, and had been in a profound stupor constantly ever since, with frequent convulsive movements.

The family physician was sent for, and arrived soon after the spasm came on. He gave a hypodermic injection of Magendies' solution, ordered mustard plaster to her spine, and then tried to control the convulsive movements by chloroform, by inhalation. About 8 or 9 o'clock he left her no better, instructing her husband to give her chloroform freely and not to be afraid of it, and to let him know if she got better, and that he thought she was suffering from malarial toxæmia. But little chloroform was given. The family physician was sent for and arrived about daylight the following morning. He, in vain, tried again to control the trouble with inhalation of chloroform, and about 8 or 9 o'clock a. m. left her to her fate, saying to the husband and friends that nothing more could be done, and that he thought she was then dying, and would likely be dead within one hour.

On my arrival I found her condition about as follows, to-wit: Pulse 120, full and bounding; respiration 25 to 30, very labored and noisy; temperature 106, eyes wide open, the pupils turned up and dilated to their fullest extent and the sclera very red. Her hips were almost enveloped in involuntary actions from her bowels and kidneys. The upper extremities flexed, the lower straight and both in a constant spasmodic condition. The head drawn back and to the left. The coma at this time was profound. She had not had anything, not even water by the mouth, then for about twenty-four hours, and could not then take anything, paying no attention at all to anything put into her mouth.

I diagnosed the trouble *pernicious malarial fever,* with a very unfavorable prognosis, and treated her as follows: I first had her clothes all taken off, and her body well washed in tepid water, then placed on a clean bed, between the two open doors, with no covering except a sheet; I then gave, hypodermically, sulph. morphia, gr. ⅓; sulph. atropia, gr. 1-60; bimuriate of quinine and urea, gr. xv.; water m. xx.; also ordered a pint of water to be slowly injected into the rectum about every four hours, and the body to be sponged every hour with tepid water, until my return, about 6 o'clock p. m. Within ten minutes after the hypodermic injection the respiration and pulse were very much improved, and she never had any more of the spasmodic movements above referred to. At 6 p. m., temperature 102 and some improvement in all the other symptoms. I added some covering and ordered

the treatment otherwise continued, except to give her water by the mouth if at any time she could take it.

November 6, 8 a. m., about as last visit, except with the water enemas; a great deal of fecal matter had been discharged, and she had uttered in a sort of delirious way several indistinct words. I repeated the hypodermic injection and ordered treatment continued.

At 6 p. m. I found much improvement in every respect. She had voluntarily taken water freely, but yet had considerable delirium. Ordered the water enemas and warm sponge discontinued, and to give, with gruel and butter, milk as nourishment and all the lemonade she could be induced to take.

November 7, 8 a. m., about as at last visit, except some improvement in the delirium, but would occasionally utter the most hideous screams I ever heard in my life, and had taken some nourishment and plenty of lemonade. I repeated the hypodermic injection and ordered the other management continued.

At 6 p. m., decidedly better in every respect; ordered management continued.

Nov. 8th, 8 A.M.—Dismissed the case. Will note here that the temperature was never over 101 after the first day's treatment. Patient made a rapid recovery, without any further drugging, and has not, *to this date,* had occasion to consult a physician again.

THIRD CASE.—March 13th, 1883, was called to see Mrs. B. She had had a chill the day before, followed by high fever, cough, etc. Had been otherwise healthy, up to date. At time of first visit temperature 104½, pulse 120, respiration 28, troublesome cough, pain in chest, and expectorating the characteristic pneumonic sputa, with physical signs of pneumonia in all of right lung. She had also (of course) been purged with some one's pills. As an antipyretic, etc., I ordered sulph. quinia, gr. xx., sulph. morphia, gr. ⅓, and sulph. atropia, gr. 1-60, to be taken in capsules early every morning. For my present purposes I don't think it worth while to detail any other of the treatment at this time.

March 15th, 2 P.M. (48 hours later), found her worse in every respect, with temp. 106, respiration 40 to 45, pulse 130, notwithstanding she had taken and retained the treatment well. I now injected deep into the deltoid muscle sulph. morphia, gr. ⅓, sulph. atropia, gr. 1-60, bimuriate of quinia and urea, gr. xv , in water m. xx. Directed no other treatment except as much water as the patient could be induced to take, and two tablespoons of good whisky, in water, milk, or with egg,

every three hours. Suffice it to say, that in about four hours her temperature was reduced to 102, respiration 30 to 35, and pulse 90 to 100, and that she recovered rapidly, without any other drugging except about one dose of castor oil, and 5 gr. dover powder every six hours and 20 gr. quinine early every morning for about four days.

To detail any more cases, treated in the way above indicated, would make this paper entirely too long. With a single proportional dose of the above indicated hypodermic injection I have frequently relieved children of the worst forms of malarial fever, and without any other drugging at all, and without a single so-called relapse, so far as I now know. And I have only used this treatment in more than one dose in any except three cases, for the last two years, which is the time I have been using this new preparation of quinia. With it I have only treated two cases of pure typhoid fever, hypodermically, and in both, I think, with the very best results. Prof. Bartholow says: "The antipyretic effects of quinia are constantly made use of in the treatment of continued fevers, as all the world knows, the administration being by the stomach." Now, if quinia is so useful for such troubles, by the stomach, how much more useful it would be hypodermically is simply beyond our capacity to estimate, especially since we have a preparation so entirely free from danger of producing abscesses. I will say here that if I have ever had an abscess from its use I don't now know it. Some time ago my friends, Drs. Russell and Simpson, used it hypodermically every day, for several days, in a bad case of typhoid fever, from which they had a number of ugly abscesses to contend with. But upon enquiry I found that they injected the drug in a *bulk into* the subcutaneous areola tissue. I have always injected it *as deep,* and as *slowly,* and as *litte* at *one point* as possible, as I always do *any* hypodermic injection, for the following, as I think, very particular advantages over the subcutaneous method: 1. It gives less pain. 2. It takes effect sooner. 3. It is not so likely to produce abscess. 4. There is comparatively no danger of injecting not more than a few drops directly into a blood vessel, an accident that we all want to avoid. This fourth advantage I try to obtain by first introducing the syringe needle as deep as I well can; then I throw out one or two minims at a point as I very slowly and cautiously withdraw the needle.

Now, I would be very much pleased and, I hope, also profited, to have the experience of at least some of the members of this Association in the use of this particular preparation of quinia, with or without the

atropia and morphia. I have always used it with atropia and morphia, for reasons I cannot here give without making this paper too long. If I am not very much deceived, this new preparation of quinia—to-wit: *quinia bimuriatica carbonidata*—is the best on record, ever produced from the cinchona tree, for use in *any way*, and for any disease, for which any of these preparations are at all useful, for many reasons apparent to any thinking medical man who is at all familiar with it. I know the great tendency in our profession to ride medical hobbies, and some times without reason or mercy; hence I have had an eye to this professional weakness, and tried to avoid it in my experience with this particular remedy.

NOTE.—I generally let the sulph. atropia exceed in antagonistic effects by amount according to effect *desired* on capillaries.

SECTION ON SURGERY.

SOME OBSERVATIONS ON CYCLONES, AND THE TREATMENT OF INJURIES CAUSED BY THEM.

BY M. K. LOTT, M. D., BELTON, TEXAS.

IN view of the fact that surgical injuries, inflicted by cyclones, are becoming more frequent as the country becomes thickly settled, I have thought a brief history of their characteristic features, by way of preface to a report of some fractures that were caused by the cyclone that passed north of Belton last April, would not be considered out of place in this convention.

Observations on storms and hurricanes were first compared, and some general principles which govern their movements discovered, by the late Commodore Maury, of Virginia, about the middle of the present century. Diligent observations of very numerous storms in different parts of the world, in recent years, have confirmed the results announced by him, that "all hurricanes are cyclones, or whirlwinds of greater or less extent of radius; that they all whirl in the same direction, on the same side of the equator; and that they are confined to certain seasons of the year in the same latitude."

In the West Indies, where destructive hurricanes have prevailed almost every year since the discovery of the Western World, it has long been noticed that they occur only from May to November, and are most frequent in October.

In the Southern States, the region most liable to their visitations, lies between the 31st and 34th parallels of latitude, and east of the 97th meridian from Greenwich.

The season of the year is not so sharply defined as in the West

Indies, nevertheless, the causes which produce them, lie in the change of the seasons, and group around certain days of the calendar. One period is at the vernal equinox, a few days before or after the 22d of March. Another, and the most dangerous, is the last week in April or the first week in May, numerous destructive cyclones having occurred about that time, and several of the most violent and extensive on the 5th of May. A less defined period is in July, and another about the autumnal equinox.

The center of the storm is usually a calm, around which a narrow belt of wind moves with great violence. The calm is sometimes of great extent, but, in these latitudes, commonly small and without sensible diameter. The opposite currents of air twisting trees, and even shrubs, like a withe twisted by hand.

In such cases, it is possible that the calm column of air exists, but is above the earth, the whirling wind meeting under it. The direction, which the whole body of the storm takes, is uniformly toward the northwest, varying from a little north of that point, to a course nearly east.

The direction in which the wind whirls is always against the sun, that is, from west to south and east; or, contrary to the hands of a watch lying with its face up; and with the hands of a watch with its face down.

The center of the cyclone moves slowly in comparison with the velocity of the wind around the moving center—usually thirty, and rarely reaching fifty miles an hour—while the wind whirling around this moving center takes up, sometimes, the fearful velocity of one hundred and twenty miles an hour. At seventy or eighty miles an hour, the wind becomes a hurricane, in which men and animals cannot keep their feet.

The track of the wind current is narrow, seldom exceeding a few hundred yards in width, and sometimes less than a hundred.

The general principles observed in the movements of cyclones, concern us in the few preventive measures which are taken against the casualties which strew their path like the field of battle. When the whirling cloud, which comes with the cyclone, is seen approaching, it will be in the southwest; and if the observer judges himself to be in its course toward northeast, his safety lies in flight toward the northwest, which is across the storm's path, and a hundred or two yards will place him out of danger.

Almost all the destructive effects are in the southeast side of the whirlwind when the wind blows northeast, because, there the speed of the wind in its gyrations is augmented by the general movement of the storm center; but, on the northwest side, its gyratory velocity is reduced by the general movement. There is an upward movement of the air in the center of the whirlwind, which carries up light substances sometimes to great altitudes; and this movement is alleged sometimes to attain great enough force to carry up heavy substances, raise men, animals, and even iron implements; but for the most part, anything taken up from the earth by the wind, remains but a few moments in the air, before it strikes the ground again; because, as soon as it has attained the velocity of the moving current of air, it is in a calm as to the atmosphere around it, and of course falls to the ground, striking it with the momentum of its own might, increased by the velocity of the wind which it had attained. A man taken up in a hurricane and carried though only a few paces, will alight as if he had jumped from a train of cars moving with great velocity; and, for this reason, light substances move by short flights, and heavy ones are rolled along the ground, the wind taking a fresh hold on them whenever their velocity is checked by contact with the earth.

On the 27th of last April a cyclone passed through Bell county, from southwest to northeast, that swept everything in its track, as only a tornado could. Houses were torn to pieces and scattered over acres of ground; large trees were torn up by their roots, and sometimes carried considerable distances, having had every limb torn from their trunks; while, sometimes, the hurricane swept across a woodland, and its course was marked by the absence of the tops of the trees, which still stand as so many silent witnesses of the power and fury of the storm.

In a house that stood three miles northeast from Belton, lived Mr. Branham and his family. At the time referred to, there was in the house Mr. B., his wife, a son, two daughters and two grand-children.

The house was turned over and crushed. In the fall, Mr. B., his wife and son were killed. Mrs. Patton, his married daughter, received a fracture of the olecranon process of right ulna, and some bruises on the head. The children were not hurt. Miss Lena, a daughter, about fourteen years old, who was just recovering from a severe attack of measles, received a compound transverse fracture of the surgical neck of the left humerus, and it is to the treatment of this injury that this part of this paper is directed.

The patient was seen at nightfall, after the very heavy hail and rain, which followed the wind, had ceased. Upon examination of the injury, with the patient under chloroform, it was found to consist of a transverse fracture of the surgical neck of the humerus, with an extensive laceration of the soft parts high up in the axilla. The great artery was not torn, but considerable damage was done to the brachial plexus of nerves, as was evidenced by paralysis of the thumb, forefinger and first half of middle finger.

The lower fragment of bone had not only pierced the soft parts of the arm, but the clothing as well. The deltoid muscle was torn from its attachment to the humerus, and the naked bone was exposed for two and a half inches, and was covered with mud. The bone was washed clean with warm carbolized water, and the fracture was reduced, but the great trouble was to keep the fragments in place. No kind of immovable apparatus was thought practicable, owing to the lacerated condition of the soft parts; and a splint that would hold the extremities of bone in opposition, would press too firmly against the vessels and nerves in the axilla. For the night, a wooden splint was applied, which was replaced by one from sole leather on the following morning, which was arranged with a hole in its upper extremity, to facilitate drainage, and the patient moved to more comfortable quarters.

On account of the extensive injury done to the soft parts, and the length of time the fractured bone had been exposed to the air, it was thought that suppuration would be unavoidable. As was mentioned above, it was found impossible to adjust the splint so as to allow free drainage, dressing to the soft parts, and protection to the vessels and nerves in the axillary space; and, yet, sufficiently firm to hold the fractured extremities in position, the muscles continually pulling the fragments apart.

On the third day after the injury, all kinds of splints were abandoned. The wound made by the bone, at the time of the injury, was thoroughly washed out with warm carbolized water, and packed with oakum, soaked in carbolized glycerine. A firm pad was placed in the axilla, over which a broad belt of domestic was secured to the head of the bedstead. For counter extension, a strip of adhesive plaster was secured to the upper, and another to the under surface of the arm, and brought together around the elbow, the arm being flexed. To this was secured a rubber band, to which was attached a weight, by a cord, which worked over a pulley, secured to the side of the bedstead. By

this means, extension and counter extension were kept up, the pad in the axilla preventing any displacement of the fragments.

Suppuration having thoroughly set in, and a considerable quantity of pus having been formed, the patient with a temperature of 103° to 104° F.; and the difficulty with which the cavity could be washed out, owing to the injury being high up in the axillary space; I made a free inscision on the posterior aspect of the arm, which communicated with the first wound. By this means, I was able to keep the wound perfectly clean and thoroughly disinfected. It was dressed every day for two weeks. After each washing carbolized glycerine was thrown into the cavity, by means of a Davidson syringe, and the cavity was then packed with oakum.

Under the influence of quinine and Dovers powders fever soon subsided; and I placed my patient on a tonic of iron with quinine and nourishing diet.

At the end of two weeks all suppuration had ceased, and instead of my extension and counter-extension apparatus, it became necssary to press the fragments of bone together, in order that they might be united. This I successfully accomplished, by elastic garter webbing, by throwing it around the shoulder and elbow, and having it sufficiently tight to make the required amount of pressure.

The patient was now enabled to get up and go about. She was sent into the open air every day, and on the 2d of June, five weeks from the time of injury, she was dismissed with a firmly united bone, and with all the motions of the arm except in an upward direction, and a want of sensation and motion in the thumb, forefinger and first half of the middle finger. At present these defects have been overcome except that motion in the fingers is not perfect. But she has a good and useful arm.

TREATMENT OF FRESH, OPEN WOUNDS.

BY Q. C. SMITH, M. D., AUSTIN, TEXAS.

IT is presumed that every physician has made himself familiar with the various modes of treatment of fresh, open wounds, as set forth in modern standard works on surgery, therefore we forbear to consume your time or insult your inteligence by going through a tedious rehearsal of the history of this subject.

We do not pretend to anything new or original, but believe it may be profitable, at least to some, to remind them of certain means and measures that experience has demonstrated as being highly conducive to the rapid healing of fresh, open wounds, in a safe and comfortable manner.

The general method and principles of treating fresh, open wounds—whether they be incised, lacerated, contused or punctured—which we advocate, will apply to either class, with such variation as the severity or class of wound would indicate, the same general principles being observed in all cases. If the wound be comparatively severe, the limb or part wounded should be so placed as to most favor *free arterial circulation* through the part near around the wound, and a *free flow of the venous blood away* from the wound.

To facilitate brevity and precision, we will now state the composition of two lotions we use in dressing fresh, open wounds:

The first is made by adding compound tincture of iodine to clean, hot water until the water is light cherry red; this we will designate the "cleansing lotion," which should be used as *hot* as is comfortable to the hand of the operator. The second lotion, which we call the "healing lotion," ismade thus:

℞. Spts. Turpentine, - - - - - - ℥ ii.
Gum Acacia, - - - - - - ℥ i.
Aqua Dist., - - - - - - ℥ ii.
Mix well. Add:
Camphorated Tinct Opii.
Pure White Sugar, in *fine* powder, - aa ℥ ii.
Mix well.

Of course in dressing fresh, open wounds, bleeding must be arrested, by ligating the larger vessels, if necessary. Then the cleansing lotion should be freely streamed over the surface of the wound, with a clean sponge, using the lotion hot, pure and clean, until all blood-oozing has entirely ceased, and for several minutes longer. During the cleansing process the raw surfaces should not be wiped or even touched with the sponge.

As soon as the cleansing lotion has ceased to drip from the wound, the healing lotion should be freely and thoroughly applied to every part of the wound.

The wound is now ready to be coaptated, which should be done in a gentle, accurate manner, using as few sutures as possible, using preferably carefully graduated, even pressure by bandages over absorbent cotton compresses. A good-sized pledget of absorbent cotton—proportioned to the size of the wound—saturated with the healing lotion, should be snugly placed over the joined edges of the wound, and over this a thick compress of dry, absorbent cotton, held in place by carefully applied bandages, for gentle, steady compression is a great aid to quick union, and a powerful safeguard against septicæmia. If the wound is of such shape or condition that it cannot be coaptated, the foregoing mode of dressing will still be in order, the absorbent cotton pledget saturated with the healing lotion, to be closely applied to all parts of the raw surface, and well covered with dry, absorbent cotton.

Fresh wounds that can be accurately coaptated, dressed in this manner, usually heal by first intention, and even extensive lacerated contused wounds will rarely suppurate, but heal rapidly, giving little pain, never producing septicæmia.

Wounds thus dressed should not be molested as long as they are comfortable and emit no odor, or show no sign of suppuration. As a rule, with rare exceptions, wounds thus dressed should not meet with water after the primary dressing, as dryness is conducive to safe and

rapid healing. In subsequent dressings the same means and principles before referred to should be carefully observed.

But should the healing process cease to progress, the healing lotion should be withheld, and, for a few days, at least, the wound dressed with the following powder;

℞. Socot Aloes.
Iodoform.
Boraccic Acid, aa in *fine* powder, - - ʒ i.
Acetate Morphia, gr. x.
Subnit. Bismuth, qs. pt. ℥ ii. M. pt. pow.

S. Spread freely over all the raw surface of the wound, and renew the dressing; soon as the wound discharges beginto moisten the dressing, or the wound emits a perceptible odor.

Wounds dressed after this plan, however extensive, if properly attended to, very rarely emit any odor whatever.

Last, but by no means least, the surgeon should not for a moment forget that his wounded patient is a sick man, and begin at once, without delay, to use all appropriate means, hygienic, pharmaceutic, and psychical, calculated to cause the constructive machinery of life to perform its every function to the highest possible degree of perfection.

As we stated in the outset, we have not presumed to tell anything new, for the mendicants we recommend have been in use more than a thousand years; or labored to achieve originality, but simply to remind you of some old, good things, appertaining to the treatment of fresh, open wounds, which we can confidently assure you, are at least equal in efficiency in every respect—and we know whereof we speak—and far more safe, simple and convenient than the elaborate toilet of the modern carbolic acid, so-called antiseptic treatment.

En passent, we would remark that our so-called healing lotion is a most admirable dressing for burns and scalds.

PERIOSTEUM GRAFTING.

REPRODUCTION OF TWO AND THREE-QUARTER INCHES OF THE CLAVICLE IN THE HUMAN SUBJECT BY GRAFTING WITH PERIOSTEUM AND WITH THIN LAMINÆ OF BONE, COVERED BY ITS PERIOSTEUM, TAKEN FROM THE DOG.

BY C. W. TRUEHEART, M. D., GALVESTON.

J. F. W., a vigorous, healthy man, of 22 years, while bending forward, dragging a gun, muzzle foremost, from under the deck of a boat, received the whole charge in the left clavicular region. About 3½ to 4 inches of the central portion of the clavicle and an extensive mass of the adjacent soft tissues was shot away, and the vertebral portion of the first rib comminuted, the charge being lodged between the scapula and the ribs.

Two days thereafter, and as soon as the shock was fairly recovered from, assisted by Drs. Jno. M. Haden and Chas. Ganahl, I exposed the dorsum scapulæ by a free crucial incision, trephined the bone with a 1¼ inch trephine, and removed sixty-four shot, three wads, fragments of clothing and numerous spiculæ of bone.

Appreciating the importance, and also the difficulties, of securing union, osseous or ligamentous, of the widely separated fractured ends of the clavicle, I made haste to secure fixation of the parts and give support to the badly drooping shoulder, by means of an angular leathern splint, made to embrace the whole arm, with straps, passing front and back, and buckled to a padded leathern shoulder-cap resting over the opposite shoulder.

Aided by skin-grafting the healing of the wound, except the excavation left by the section of destroyed clavicle, was accomplished in six or seven weeks; but on the removal of the leathern splint support, nine weeks after the injury, the shoulder was found to droop in a most dis-

figuring manner, and, by reason of want of fixation of the shoulder, the movements of the arm were seriously impaired.

A thorough examination revealed *no evidence whatever of any effort or chance for union of the bone, osseous or ligamentous.* I then determined to resort to periosteum-grafting. By means of the curved scisssors and fuming nitric acid, by removing the new tissue formation in the track of the lost bone, and by scraping off the cartilage formed on the ends of the bone in making an excavation about ¾ of an inch in depth below the surrounding surfaces, an inch to an inch and a quarter in width, and measuring 2¾ inches between the nearest projections of the ends of the fractured bone. To maintain the proper length of clavicle the wedge-shaped axillary pad, etc., was applied. Having secured healthy granulations, rendered more vigorous by pencilings with a ten to twenty grain solution of the nitrate of silver, I proceeded to graft the wound with periosteum taken from healthy dogs, chloroformed or killed for the purpose. In case of the animals chloroformed the grafts were obtained from the superficial portions of the long bones of the legs; the scapulæ, from the dog killed, furnished the best grafts. I found that a short, stout resection knife, curved on the edge at the point, best suited for cutting out the grafts, whether of periosteum alone or combined with laminæ of bone, using the curved scissors for smoothly completing their separation. The grafts taken were of the size of a large flax-seed, and applied with as little delay as practicable. The entire surface of the excavated wound, and the ends of the fractured bone were set with the grafts, placed about a quarter to three-eighths of an inch apart. After waiting some thirty or forty minutes, for the wound to take on the glazed appearance due to the flowing out of lymph on its surface, the grafted surface was covered with perforated oil silk; a compress of picked lint, moistened in a 2 per cent. carbolized water, put on, the whole being held in place by adhesive strips.

On the fourth day, when the dressing was removed, about seven or eight out of ten of the grafts of the plant were found to be in process of "taking;" a better result than with human skin grafts.

The behavior of these periosteal grafts was peculiar. Like the human skin grafts, when applied, they promptly adhered like leeches. From the sixth to the tenth or twelfth day—according to the activity of development in the individual graft—the pale red of the periosteal tissue was observed to be giving place to a deeper, brighter red. With the aid of a compound magnifying glass, minute points of granulations,

with their loops of capillaries, could be seen cropping out through and blending with the tissues of the graft. In addition to this development in the grafts themselves, the surrounding granulations of the wound seemed to take on a marked activity, resulting in a rapid envelopment of the grafts; the granulations of the wound seeming to rise up around and cover in the grafts, creating a little sinus-like opening of communication between the surface of the wound and the graft, in this, its sunken nest. After a few days or hours these minute openings closed entirely, leaving only little depressions to mark their site. As soon as the grafts had been thus swallowed up, another grafting of the whole surface was done as before. Three successive plants were made in this manner in the course of a month; cicatrization of the edges of the wound being retarded in the meanwhile, by cauterization. The excavated wound having at last become filled out with granulations, the surface was skin-grafted with human skin, so as to hasten the healing over and diminish the tendency to contraction of the cicatricial tissues.

RESULTS.—Two months after the periosteum-grafting, examination of the parts revealed the fact that *the two and three-quarter inch gap in the clavicle had become filled out* with a tissue possessing the characteristics of bone as to hardness, inflexibility and perfect performance of the function, of giving support to the heretofore drooping shoulder. As felt, beneath the tegumento-cicatricial covering, the result of the skin-grafting, the surface of the new section of bone was nodulated and rough, like a mass of rapidly developed exostosis. It was wanting, however, in the natural contour of the adjacent portions of the clavicle; being more flattened out in its transverse, and more or less distorted in its long axis. There was no appreciable difference in the length of the two clavicles at this time; a careful measurement made two years later, showed the bone to be one-quarter of an inch shorter than its mate of the opposite side.

And now the question arises, was this filling up of the gap in the clavicle with *osseous* tissue the result of the periosteum grafting? Might not it have been accomplished by proliferation of scattered fragments of periosteum, left in situ when the bone was shot away; or the result of development or extension of the ends of the fractured bone. I am firmly convinced that this formation of bone resulted directly from, and could only have been accomplished by, the periosteum-grafting done. I recognize the fact that we are all prone to argue *post hoc, ergo proctor hoc.* It was evident however, from the extent and peculiar

character of the injury to the soft parts that no portions of periosteum could possibly have been left behind; and from quite extensive observations in this class of injuries, in the Confederate hopitals in Virginia, and in the late Franco-German army service, I am convinced that so extensive a loss of bone could not, unaided, have been restored. Besides, nine weeks had elapsed after the injury and no effort at bone formation could be discovered when the periosteum-grafting was undertaken.

The above case of grafting was done in 1876. I have deferred from year to year, its publication, hoping to have had an opportunity of making further trials in similar cases, but have failed to find suitable cases in individuals possessed of enough good sense and freedom from prejudice to submit to obtaining valuable healing by means of the transference of needed tissues from the lower animals to their own precious bodies. I set up no claim to originality in the extensively cultivated field of "tissue-grafting." Although I fail to find mention, in the literature accessible to me, of a similar case; doubtless others have done the same and possibly with equal or better success than in my hands.

Since writing the above I have fortunately had the opportunity of examining J. F. W. again. As the result of a severe fall, some months since, a simple fracture of the new formed section of clavicle, with angular union has occurred. In other respects the bone remains unchanged, except that some contraction in its transverse diameter seems to have taken place since my previous examination, made about three years ago.

ANIMAL LIGATURES AND SUTURES.

TENDONS OF THE LEPUS—OR MULE-EARED RABBIT—AS A MEANS FOR THE ARREST OF HEMORRHAGE, AND THE CLOSING OF SURGICAL WOUNDS.

BY H. W. DUDLEY, M. D., HILLSBORO, TEXAS.

SINCE the revival of the ligature, by the great French luminary of surgery, Ambroise Pare, which occurred about the middle of the sixteenth century, various substances have been employed for the purpose of ligating arteries and adjusting wounded surfaces by means of sutures, viz.: hemp, twine, cotton, etc. of the vegetable kingdom, and shreds of leather, silk, catgut, nerves and nerve sheaths, horse-hair and tendons of the curous of the animal kingdom, and gold, silver and platinum of the mineral kingdom, all of which served a good purpose, and any of the various classes are far better than the barbarous and inefficient means of arresting hemorrhage in the manner practiced during the dark ages, viz.: the actual cautery, rod-hot knives, etc.

That ligation is the safest and simplest way of arresting hemorrhage from a wounded artery of any magnitude, no surgeon will deny. This being true, we also know, that, of the three classes, the animal kingdom furnishes ligatures much superior to any others. But the question arises, is there not some form of animal ligature superior to another? I think so, and that is the tendon of the *lepus* (or mule-eared rabbit). The advantages that these ligatures possess over others that I have used are these:

First—They are animal tissue, of a very fine and delicate structure, capable of being spread out like tissue paper. Truly they are an aponeurosis of muscles rolled upon each other, susceptible of being torn into minutest shreds if so desired.

Second—They are sufficiently strong to perform the function required of a ligature or suture.

Third—They are less irritating than silk and more capable of absorbing moisture, which causes them to become quite soft, about the fourth day after they are applied, and they are rapidly removed by absorption.

Fourth—The ligature can be cut off, close up to the artery after its application, leaving no ends hanging out of the flaps of the wound, to favor suppuration, when you desire union by first intention.

As sutures, these tendons possess the same advantages. as when used, as ligatures, only in a less degree, so far as absorption is concerned. The cause of this is the want of the suture being enveloped by living animal tissue. It is not unfrequent, however, for some stitches to be entirely absorbed, and others to be severed on the under surface when left as long as five to eight days.

I do not claim any proprietorship in the introduction of this form of ligature and suture, for there may be others, who have used it, before myself, but so far as the use of it with me is concerned, it is purely original, never having heard of its introduction into surgery before I began its use, nor have I seen any mention of it since. I have been using this form of ligature and suture in my own practice since August, 1881. With me the use of it was accidental. Circumstances were these: During that month I was out one afternoon with my brace of "Gray Hounds" for a chase. My dogs jumped a rabbit, and after running it some distance, caught it just as it was running under a barbed wire fence. When I rode up I found that the wire had inflicted an ugly wound upon the dorsum of one of my dogs. I carried the dog to an adjacent spring, and with the assistance of a friend, washed the wound and proceeded to sew it up. Finding I had no silk in my pocket case, I concluded to try the tendon of the *lepus*, which lay near by. I did so. The wound healed by first intention. I never removed the sutures.

I have never used the fresh tendon except in the above mentioned case. Yet I have never used other ligatures since. My method of preparing the ligatures is to cleanse and separate the tendon into small strings, and place them in a wide mouthed vial, and keep them covered with a 5 per cent. solution of carbolic acid and glycerine. When so prepared and preserved, they will remain soft and pliable for an indefinite length of time. The specimens which I present for inspection on

this occasion are fresh and in good condition, though they were prepared September 21st, 1881.

I have used these tendons seven times as sutures to close incised and lacerated wounds; five times as ligatures to control arterial hemorrhage. The anterior tibial and brachial are the largest vessels I have ligated with this form of ligature. In all these cases the result has been alike satisfactory. Would give details of the cases were it not infringment upon the time of this society.

Hoping the subject may be investigated by other members of this association, I respectfully submit the same for their consideration.

ANTAGONISM BETWEEN SYPHILIS AND CARCINOMA.

BY DR. EDMUND GOLDMANN, MONTEREY, MEXICO.

DURING my sojourn at Vienna, I attended a private course with Dr. Scheuthauer, then assistant of the late distinguished Rokitansky; at present, Professor of Pathological Anatomy at the University of Pesth.

In conversation with that learned gentleman, he one day mentioned to me the interesting fact, he had observed, that among the many thousands of post mortem examinations which he had made personally, he had never met a case in a cadaver wherein cancer and syphilis had occurred side by side. This interesting fact communicated to me, has caused me to fix my attention somewhat on the matter, and I am now, after five years practice in this country, in the position to give a few items, which I hope may not be uninteresting. I may condense the result of my experience, in stating that I have never met the two affections in the same person; that, according to my view, the one excludes the other; and that, while carcinoma holds for a long time the position of a parasite or a foreign body, growing within the human body, syphilis is from its beginning an infection, produced by a contagion like that of glanders, with which it was confounded by the physicians during the siege of Naples; that, therefore, the two diseases have nothing in common together.

Some seven or eight years ago I read in the London Medical Record a clinical lecture by a teacher in one of the hospitals of that city, in which the lecturer intimated that there was a sort of relationship between the two. In my opinion this is decidedly erroneous. I have never seen a case, nor seen one mentioned in the literature at my disposal, in which a syphilitic father, for example, was the progenitor of a child with a cancer; nor have I seen a case in which a mother, afflicted with cancer, gave birth to a child with syphilis. Even the

inheritability of cancer is not such a fixed, settled fact, as far as it is the question of transmission from progenitor to child. For I have met, myself, with several cases in which the grandmothers died of cancer, the daughters never became affected by it, and the grand-daughters again were assailed by the same. Thus, the hereditary disease skipped the child, to reappear in the grandchild—an occurrence which in syphilis was never observed, as far as I know.

Already the histological construction is widely different. The gummy tumorh as, so to say, no structure at all; the so-called cells, which I have been able to see, at the time when I worked with the microscope more than I do now, bore the appearance of white blood corpuscles in a state of decrepidity, more than anything else, and the connecting substance appeared to me like an abortive attempt of nature to create such without being able to fulfill the task.

It is quite different with Carcinoma. Here we have a massive structure from the beginning, with a dense, fibrous tissue within the alveolæ, of which the cells are imbedded like so many eggs in a hen's nest. To use the phraseology of Waldeyer, "Carcinoma is an epithelioid neoplasm in which the cells stand to the connecting tissue in the relation of contiguity instead of continuity." These cells are very active and increase rapidly in number; they emigrate and form new colonies, establishing in this manner their fatal reign in every direction. Only at a later date metastatic tumors invade distant organs and lead to general destruction.

The cachexia, which develops itself in the progress of cancer, is at first the consequence of the excessive consume of albumen, which is withdrawn from the blood and required for the growth of the neoplasm; thus creating after some time, a considerable disparity or disproportion between the income and the expenses of the body to the prejudice of the same.

Syphilis acts quite differently; after the first appearance of the induration a short time elapses, during which infiltration of the glands takes place; attacks of chills and fever occur, giving evidence that there is something contained within the circulation which the body struggles to eliminate; then the macular eruption appears, the color of which would indicate that the blood is either imperfectly arterialized or that a great many red blood corpuscles have already lost their power to functionate properly. I have seen a number of cases in which, instead of the characteristic copper color, the spots showed a livid, half cyanotic hue

and I find no better way to explain to myself this phenomenon. The symptoms which follow, it is hardly necessary to mention, are general and not local. The excision of the hard chancre of the prepuce does not even prevent the general infection, because that exists already. The cachexia which follows I shall not attempt to decide, whether it be produced by the destruction of the red blood corpuscles or by the infiltration and impaired functions of the lymphatic glands and the cutting off of the supply of the material necessary to create new corpuscles. Perhaps both causes combined lead to this result. Certainly there is no similarity and no relationship existing between syphilis and cancer. Syphilis is a poisoned stream that irrigates the body and impregnates every part of it; it is local at no time, only in the moment of contact and inoculation; carcinoma is of the nature of a parasite, and local at first. Perhaps a bacillus, that causes the syphilitic infection may be found in the near future by Koch or some other first-class microscopist, and I fondly hope he may at the same time discover the means to destroy it without detriment to the human body. Indeed this would be a triumph worth striving for and would secure immortality to the name of the discoverer.

I mentioned above the fact communicated to me by Professor Scheuthauer, that he never has found carcinoma and syphilis in the same individual. My experience confirms fully this observation. In this country syphilis is very common among men and cancer very rare; syphilis is, in all countries, more frequent among men than among women, and carcinoma, on the other side, is three times more frequent among women than among men. This permits us to consider the latter as a disease befalling, principally, the feminine half of the human race.

During the five years I have practiced in this city I have seen only one case of cancer of the stomach, in a man of German nativity, who never had syphilis in his life, and whose children are the very picture of health. Of male Mexicans I have had no case to attend to; but I suspect cancer of the pancreas in a man whom I have under treatment at present. I am not sure of my diagnosis as yet, having seen the man but very few times, and this being a case which offers some difficulty to decide. He also is the father of healthy and beautiful children, and never has been syphilitic. While syphilis is very frequent with men in this country, it is very exceptional with women, and, generally speaking, is limited to prostitutes. I have never seen a case of carcinoma among these women, nor have I heard of any from my confreres. In fact, I

can state, positively, that in all the cases of cancer which came under my treatment here syphilis was out of the question.

My experience has taught me a singular fact, moreover, to which I wish to call the attention of the profession, viz.: That nearly all cases of cancer occurred either in unmarried ladies, between 30 and 40 years of age, or married ladies who never bore children, or widows, who had lost their husbands after a short conjugal life, and had remained for many years since in solitude. This has suggested to me, that not only a hereditary disposition may lead to this pathological production, but also the want of reproduction of the physiological order. It seems as though the non-employed innate power and tendency to reproduce, being active all the time, becomes deviated and finally culminates in the production of a pathological neoplasm.

Considering that carcinoma is an epitheloid neoplasm, and what an important part the glands of the interior sexual apparatus and the breast of woman have to play in the act of reproduction, the want of utilization of their physiological productions is likely enough to lead to an attempt of nature to seek vent in another way. I think this might serve as an explanation for the frequency of cancer of the uterus and breast in woman. Singular enough it must appear, that in maiden ladies, whose breasts were never exposed to the irritation and maltreatment to which those of a nursing woman are subjected, cancer of the breast is of comparatively frequent occurrence.

The following is a synopsis of my cases:

Unmarried Ladies—Three cases cancer of breast; in two operated successfully, and one not operated.

Married Ladies, without children—Three cases, two of uterus and one of breast; attempted operation in one of the former, but abandoned it, finding it impossible to proceed farther.

Widows—One case, child 18 years; one case, child 14 years; one case, two children, 20 and 17, respectivly, and one case, no children. No operation attempted.

As will be seen from the above, I have nothing to boast as to my success. The case in which I abandoned the operation, before going too far, was complicated with most violent hemorrhages and a state of anæmia consequent upon it, which made any further progress most hazardous. The two cases of cancer of the breast, in which I refused to operate, were complicated with deposits of metastatic tumors of the pleura and stomach respectively. In all the cases of cancer of the

uterus an operation was simply impossible on account of adhesions and extensive carcinomatous infiltration of the vagina, rectum, bladder, the inguinal glands and a number of small tumors disseminated over the peritoneum.

Under such circumstances I considered any operation, even the best and most skillfully executed, unjustifiable. An operation should, in my opinion, only be performed with the view to and the probabilities of success. Already the state of anæmia, existing in these patients, makes the use of chloroform a dangerous proceeding, which may lead to a sudden paralysis of the heart.

The cases of cancer of the breast, which I operated upon, are the only successes that I have been able to achieve. They have not shown any recurrence; one of them was operated on more than two years ago.

In view of the antagonism or incompatibility which seems to exist between cancer and syphilis, the question has repeatedly suggested itself to me, whether it would be justifiable to make the experiment with a patient or patients, afflicted with carcinoma in an advanced state, and to try the inoculation of the syphilitic virus, in order to ascertain whether this infection will have any effect in preventing the further development of these malignant tumors. If such should be the result it would be a splendid achievement, since we would have it in our power to substitute a disease, which is amenable to a successful treatment for one that gives no quarters and is sure to terminate in death.

SUCCESSFUL KNEE-JOINT AMPUTATION.

BY C. M. RAMSDELL, A. M., M. D., AND F. R. RAMSDELL, M. D., LAMPASAS.

THE accompanying picture, taken on the day after the operation, shows the result of an amputation, at the knee-joint, for incurable chronic ulcer of the leg, of 29 years standing.

The patient, M. N. Godwin, is a native of North Carolina, white, aged 57, a harness maker, but for several years has worked at all kinds of odd jobs. He says that the ulcer was the result of an injury inflicted by a blow on the shin from an ax, and that the other leg became inoculated from carelessness in wearing his socks, changing them from the sore leg to the sound one. The left leg has been well for 13 years, but the cicatrices and discolorations show that there have been extensive lesions on it. He denies any specific cause for the ulcers, but being a man in whom the vital organization predominates over the intellectual, circumstantial evidence should go a great way in determining the facts in the case. The operation was undertaken March 23, 1883, at his own urgent request. Ether was administered, notwithsanding the fact that the patient was considered to be in the later stage of consumption, Esmarch's bandage applied, and amputation performed at a point about three inches below the knee-joint. The bones were found to be diseased, the medulla so soft as to break down at the slightest touch, and the arteries affected with fatty degeneration to such an extent that two of the ligatures cut through on attempting to tie the vessels.

It was then determined to disarticulate, and this was done, leaving the patella in situ and bringing up a long posterior flap from the calf of the leg, the integument on the front being too much diseased to be of any use. Four vessels were tied, besides the popliteal, and in ligating the latter it was necessary to include the vein and some fibres of the nerve, all these being consolidated by former inflammatory action. The

calf being very much shrunken, and the condyles of the femur being rather large, the flap was barely sufficient to cover the articular surface at the time of operation, so that in a few days the swelling of the soft parts caused the wound to gape, exposing a considerable extent of cartilage. The exposed portion, however, soon became covered with granulations, and eventually healed over, as seen in the illustration. Suppuration was profuse, although the wound was dressed with cotton and sponges soaked in a strong solution of boracic acid, and covered with oil-cloth. The first ligature separated in two weeks; the last, that around the popliteal, not till the end of six weeks. The pus burrowed under the patella and up the sheath of the quadriceps femoris, and continued to flow, in greater or less quantity, until about ninety days after the operation. The patient had fever, diarrhœa, night-sweats, a terrible cough most of the time, but in the main retained his appetite; and by the liberal use of food and stimulants has made a fair recovery under the most unfavorable circumstances. His unwavering determination to get well has, no doubt, had much to do with the result. An examination of the amputated limb showed that the skin in the region surrounding the ulcer was thickened to half an inch, the veins being about the size and appearance of a clay pipe stem, the lumen in some of them being barely large enough to admit a fine silver probe. All the muscles on the front of the leg were changed to fat, and the tibia much enlarged in its lower third.

No secondary hemorrhage took place, although it was confidently expected. Boracic acid, carbolic acid, and permanganate of potassium were the antiseptics used.

His recovery exemplifies the endurance of the human frame, rather than the triumphs of modern surgery. Drs. P. S. Jenkins and L. G. Lincecum gave valuable assistance in the operation.

STRICTURE OF THE MALE URETHRA.

BY E. W. RUSH, M. D., PARIS, TEXAS.

MR. PRESIDENT AND GENTLEMEN: In presenting this subject to this learned body, I hope it is not expected that I should introduce for their consideration upon this occasion anything novel or entirely new in points of pathology, as well as to the treatment of the subject under consideration; yet, in keeping with our custom, as your committee desired this subject to be brought and discussed before this intelligent body, I therefore ask your kind indulgence and beg leave to submit a brief paper relative thereto.

In stricture of the male urethra I desire to call your attention first to the anatomy of the part. That space between the *meatus urinarus* and the neck of the bladder is denominated the urethra, and is usually in the male eight or nine inches in length, which is composed of three coats—the mucous, muscular and erectile—and is also respectively divided ito three portions, the prostatic, membranous and spongy. The prostatic is one and one-fourth inches in length, extending from the base of the gland to its apex; the membranous is only three-fourths of an inch in length and extends from the prostate gland to the bulb of the corpus cavernosum; the remaining six inches is the spongy portion extending to the meatus urinarius, and the whole canal in a flacid state represents a double curve. Now that we have properly understood and prepared to appreciate a normal urethra, we desire also to impress upon you the importance of a correct idea of catheterization, although you may think the procedure a commonplace one, and that any tyro may be equal to the emergency. Be this as it may, I for one must hold (and the most of you will bear me out in the statement) that in the domain of surgery there are few procedures that carry with them so much care, tact and delicate manipulation as this seemingly

simple operation, more especially when connected with obstruction of the urethra. Yet I would have you appreciate the difference between obstruction and organic stricture. The former, you will remember, may occur from any inflammatory engorgement of mucous or submucous tissue (so-called inflammatory stricutre), or spasm of the urethral muscles (spasmodic stricture), or an abscess or tumor on the outside of the urethra or fracture of the pelvis, impacted calculi or a polypus, in the urethral canal. Now in this connection you will readily perceive the *indicatio morbilis* and the individual symptoms will yield *in pari passu*.

I remember while visiting the Bellevue Hospital in the city of New York, in 1880, in company with Dr. Sands, visiting surgeon at that time, a lad of thirteen summers was entered and assigned to a certain ward. An examination revealed retention of the urine, accompanying severe contusion of the perineal region, consequent upon falling astride of a balustrade of a stairway. The boy was ordered to be put to bed between two warm blankets; a catheter was warmed and well oiled and insinuated into the urethra, but did not pass beyond the membranous portion. Evidently obstruction—or, if you please, stricture—existed from inflammatory engorgement. The exigences of this case demanded aspiration, which was done by Dr. Sands, and repeated every thirty-six hours. Of course a dry diet was instituted. In the course of ten or twelve days I had the satisfaction of seeing the catheter again used, which, with considerable coaxing, passed, and for the first time in two weeks his water passed *per vias naturalis*. After this the sound was introduced every twenty-four or forty-eight hours, gradually increasing its size until a requisite one was reached, and in a fortnight the lad was discharged, entirely well.

Again, in catheterization of a normal urethra we cannot take too much pains in attention to little things, such as having the instrument well cleansed, warm and well oiled, and last but not least, to have our patient put in a warm bed, and administer a large dose of quinia sulphatis after the operation. In doing this you will probably spare yourself a needless visit, for if such is neglected your patient may have a severe chill or nervous rigor, which sometimes results in death, as I have recently seen it so recorded in our late journals.

However in contradiction and to my surprise, like all aphorisms perhaps, I had the opportunity of observing not only the effects of continued and persistant efforts at catheterization, but at the same sitting

aspiration of the bladder, in consequence of failure to pass the catheter The subject was a patient of Dr. Hooks, of Paris, Texas, who asked me to assist him in the case. After repeated efforts of catheterization, using any and all sizes of bougies and catheters at our command, we had to abandon the project in favor of aspiration of the viscus. This in consequence of false passages in the urethral canal, having been made by attempts at previous catheterization, as well as a desire on our part not to complicate the case more. Yet what I desire most to say is that after strict commands to our patient to keep his bed, he saw fit to go about his daily work, even in the worst of weather, without any untoward symptoms.

Now in the passage of the instrument, if it be metal it is necessary that you should have in your mind's eye the route that your instrument is to take, and a good illustration, as Dr. J. B. Roberts, of Philadelphia, gives it, is very similar to that of putting worms on a fish-hook. At any rate, the only difficulty you will perhaps encounter is the passage of the instrument through the triangular ligament. When this takes place it is quite embarrassing to both the patient and surgeon, but this can readily be avoided by drawing the legs well up and observing not to tilt the handle of the sound up until the curved end is well down in the perineal space. Again, probably you may meet with an enlarged prostate, especially so if your patient is rather old. In this instance you can very readily also correct the trouble by placing your index finger in the perineal space; you will at once feel the obstruction; lift up the end of the sound and it will mount over the gland and glide smoothly into the bladder. However, if the above maneuver should fail, then introduce the index finger into the anus and disengage the impinging catheter or sound, and your object will be accomplished.

Now *en passant* to organic stricture, which you are aware is produced only by inflammatory deposit upon or near the mucous membrane, and resolves itself into simple, organic or traumatic stricture. Mr. Bryant estimates the proportionate occurrence of the former to the latter to be fourteen to one; also, that in the majority of cases the contraction is due to chronic inflammation of the passage. However its growth and development may be so insidious as to escape the notice or fail to arrest the attention of the patient, and not until after some irregularities in diet or exposure to cold, a sudden attack of retention of urine supervenes. This symptom for the first time draws his attention to his condition. The stricture may be of various kinds and their names

given by different writers will indicate the character of each stricture. Thus the "diaphragmatic," "whip cord," "ring or annular," and others varying from a narrow band of deposit to broader ones which answer to Sir A. Cooper's "ribbon stricture."

Again the whole canal may be impermeable with one continuous stricture, as seen in the pathological specimens in Guy's Museum, of London, or as seen by John Hunter, as many as six or seven strictures in the same canal at the same time. Yet as to the most frequent locality of stricture, we are indebted to the labors and researches of Sir Henry Thompson for facts relative to the analysis of 270 preparations of various museums in which he asserts and is, I believe accepted that the majority of strictures occur at the juncture of the spongy and membranous portions of the urethra, and about one inch in front of this, is the next in frequency to seat. Exceptional cases may occur at the prostatic end of the membranous, or at the *meatus urinarus*, or at the terminal (two inches), but never in the prostatic portion of the urethra.

Mr. Bryant says in reference to the cause of stricture, that an inquiry of 646 cases revealed the fact that chronic gonorrheal inflammation had existed in 273, and out of that number only 78 had used injections at all, 43 were ascribed to direct injuries or traumatic stricture. Therefore it is reasonable to conclude that although gonorrhœa often precedes stricture, at least half the cases are found in subjects who have not suffered from such a disease; and when gonorrhœa is assigned as a cause, the use of injections for its cure does not appear to have had any influence in producing a stricture.

Now if Mr. Bryant is correct in his analysis, which we cannot doubt, as he appeals to the reliability of his observations, to-wit, that injections do not have that injurious effect ascribed to them by most writers, although most of you have been taught otherwise, or at least to spare the stimulating injections for fear of stricture. I wish to be conservative, however, but I fear we too often ascribe stricture of the urethra to this source; and I say with all candor and good feeling, that we as a profession often mistake, whether intentional or otherwise, by condemning a previous treatment of gonorrhea where now exists a stricture, a conventional legacy.

To illustrate this more fully: A married gentleman came to me in the fall of 1877, confided to me his trouble, and wished me to cure him as speedily as possible, stating that he had to return home in the country the same evening with his wagon and team, and requested me

to put up a sufficiency of medicine to perfect a cure. In compounding my prescription for the injection I wrote for the directions, "One teaspoonful to one tablespoonful of water, and use as an injection three or four times a day," and called his attention to the same. After retiring far away, some three or four miles, he halted and took his first injection. I had also impressed upon him the importance of holding the injection in the urethra for a few minutes. This he did, as on his return, to use his expression, "the clap took it all up." Of course this man, like a great many others, used the medicine without looking at the directions and used it full strength. He also stated that after using it he could not pass water, and that he was in great agony and writhed on the ground like a worm, but after making frequent attempts to pass his urine, something protruded from the mouth of the penis. He pulled it out and says he looked through it as if a quill, hung it on a bush, and returned to me saying that "the whole d—d clap come out at once."

Now, gentleman, I felt more or less culpable, and thought I surely would have a stricture to deal with; but not so. The case recovered promptly, and I have seen him since repeadly; besides, he has sent me several cases, as he thought I was "a dead shot on the clap" as he termed it. I do not quote this case for the jest of it, for there is a moral connected with it. In all probability if the patient had fallen into some other hands the treatment (though unintentional) would have been condemned, and a stricture, if existing, attributed thereto.

You remember this, the abortive plan of treatment was in vogue a long time since, and it appears from statistics that its frequency is no less now than then. Again, Dr. S. W. Gross says that masturbation is a prolific source of stricture. Thus, from constant irritation, we may have a catarrhal condition that eventuates in stricture. We also know that from the same source (catarrh) we may have stenosis of the cervix uteri, atresia of the vagina, stricture of the rectum, and of the ductus canaliculi and entropion palpebrarum, these occurring in the absence of the use of astringents.

Again, Sir Benjamin Brodie ascribes organic stricture in some instances to a phosphatic diathesis. As to its correctness, many dispute it; yet there is no question as to its presence producing spasmodic stricture.

As to the symptoms of stricture I shall not detain you long, as I presume the most of you are quite familiar with the same. It is a fact,

however, when stricture does exist the subject becomes dyspeptic, care-worn, complains of chilliness, etc., and in the majority of cases, as I have said before, is recognized by sudden retention, which is perhaps preceded by some excess in eating and drinking, or exposure to cold. And if the subject will now refresh his memory, in all probability minor symptoms will revert to him, such as narrow, divided, twisted, or a screw-shaped stream, or prolonged micturation, with slight pain. Yet you must not infer that because retention is present that you have spasmodic stricture. It is to be remembered that at the lesion contraction is going on in consequence of deposited plastic material. Now, if you have any excitement or irritation, induced either by reflex action or chemically changed urine, this accounts for spasmodic stricture with retention. Out of 483 cases admitted into Guy's Hospital, 129, or more than one-fourth, had retention.

If there is no interference the urine will begin to dribble away by drops, and lastly cease to flow altogether. During this time the bladder becomes very irritable, owing to chemical deposits, the urine possessing highly ammonical odor, etc.

Prolapsus recti, tenesmus, etc., as symptoms of complications ensue, the symptoms being very palpable, central globular swelling, giving a dull sound on percussion. Now, if the viscus is not relieved by aspiration, or puncture of the cysto-rectal wall, dilation of the urethra behind the stricture is the result, and soon an ulcerative condition of the cellular tissue by percolation of urine which eventuates in an abscess, and finally leads to perineal urinary fistula, cysto-rectal fistula, etc., which are treated on general principles, *secundum artem,* and each individual symptom met and combatted by plans laid down in our text books.

In determining the existence of stricture, as well as in its dilatation, metalic catheters, elastic catheters, filliform bougies, and Dr. Otis' urethra meter are used.

Mr. Bryant recommends the acorn tipped bougie as the best. Others, Thomas' metrical gauge, while still others prefer the gum bougie, or a silver No. 8 catheter. I have succeeded with the last two named for all practical purposes, yet they are, I admit, not so convenient to estimate the distance of lesion from the meatus urinarus. The results of all strictures, if complicated, proves sooner or later a serious detriment to kidney and bladder, therefore should be looked after from this standpoint *ab initio.*

Again, impotency, or rather sterility, has been ascribed to stricture of the male urethra. (See Ziemson encyclopedia.)

Now, I cannot conceive why the virulent powers should not be as potent, even accompanying a stricture. Yet I do understand why sterility might not possibly abound, is more than probable. This is in consequence of an irritable condition existing in the locality of the stricture, during coitus, and at the act of ejaculation, the semen, instead of being forced through the constricted urethra and finding its way into the vaginal and uterine cavities, is forced back *a-vis-atergo* into the bladder.

Now, as to the treatment of stricture, I shall not detain you long, since I have given you hints from almost the beginning of this paper as to the manner and mode of conducting the treatment of stricture.

All treatment must be conducted upon general principles, relative to its cause, present condition, and to the future expectation of the operation.

In the British Medical Journal, February 23, 1884, Dr. John Ward Cousins thus writes:

"As regards the surgical management, heroic measures, in my opinion, must be excluded, as both unsuitable and unsafe. Rapid dilation and splitting are generally out of the question, and will surely be followed by disturbance, stamped with malarious periodicity. Even gradual dilation cannot be undertaken too cautiously. The operation should always be performed in a warm room, and with the patient well protected with warm clothing. It is my practice to fill the urethra with warm oil, and always to use soft tapering dilators, introduced over a catgut or whalebone guide. The instruments should be very gently manipulated without causing pain or any mechanical injury. We must always be satisfied with very slow progress, and, during the early stages of the treatment, it is often desirable to allow an interval of several days. With these simple precautions, I have generally found that the urethra soon become tolerant of mechanical interference."

In my opinion mild means are to be preferred, everything being equal, to the forcible or cutting measures. The object to be accomplished is very plain in every case, primarily to dilate the contraction. Secondarily, to obtain absorption of the deposited inflammatory products. The treatment by dilatation may be by continuous or intermittent.

I believe that it is generally conceded that the continuous method is the more preferable, and in your selection of an instrument you should give a tolerable large-sized one the preference at any rate; Dr. Otis, of

New York, believes there is a definite relation between the circumference of the penis and the largest bougie, to be used warmed and well oiled.

Now, having accomplished your object, you should, as recommended by most authorities, let the sound remain in for some twelve or twenty-four hours, but I have never done so. Yet, after twenty-four hours I use a larger size sound, and continue to do so from time to time until my object is accomplished, which usually requires some ten or twelve days, during which time it is not necessary for our patient to keep strictly in bed, but should conform to a passive state of rest. If the bladder should prove irritable in the course of treatment, we should institute alkalies, and desist from further attempts at present; after which has been subdued, by appropriate remedies. You must endeavor to carry out the full plan of treatment. Keep up the passage of the instrument until all the parts are repaired. The rapid method, as recommended by Holt, Hutton, Buchanan, Thompson, and others of Europe, and Gross, Otis, Keyes, and others of America, are generally accepted by the profession. But in certain varieties of strictures they are not only unsuitable, but dangerous; but there are cases we sometimes meet that do not admit of either of the two above operations. These are the highly irritable and cicatricial strictures which call for external division of the stricture from the perineum. A most eligible method is that recommended by Mr. Syme, urethrotomy, both internal and external procedures can be had recourse to.

For description see Gross, Bryant and Erichson. After these operations, the patient should command skill enough to pass the bougie or sound as may be required.

In concluding this article, I will only refer to the methods of operation in the cutting measures by simply citing you to the names that you may look after at your leisure, or when you may desire to operate: Wheelhaose, Cocks, Gouley, Van Buren and Symes. Any and all of these are indicated at times, but I think could be greatly simplified, in a measure.

I remember, while in Europe, seeing Sir Henry Thompson operate repeatedly, most of the time when cutting was indicated, using a rather long, curved, blunt-pointed bistoury, especially where the stricture exists in the near end of the membraneous portion, and towards the meatus urinarus, but when it existed beyond this point Civiale Bistoury Cache used the rapid dilation, and followed up with subsequent introductions of the sounds.

In conclusion, I refer you to a new instrument for dilating the urethra, introduced to the profession by Dr. Jos. H. Warren, of Boston, It consists of a hollow staff and a central stem, and works very much like the Llalemans porte caustic instrument for cauterizing the ejaculatory duct, the curved end having a spiral screw and wedge-shaped tip, which it is alleged dilates with less friction; also the Laminara, catgut and other material for dilating purposes, but they have many objections compared to the catheter or sound.

SURGICAL CASES.

BY ALEX. W. ACHESON, M. D., DENISON.

CASE I.—INJURY TO ELBOW JOINT.

ON Sept. 22d, 1878, Mamie B., aged 9 years, in a playful scuffle was pushed over, and fell in such a way as to injure the right elbow. On examination, an hour afterwards, it was discovered that the external condyle was fractured, the line of fracture extending from about the centre of the articulating surface, upward and outward to a point about an inch above the most prominent part of the external condyle.

The arm was placed in a semi-flexed position, and incarcerated in a plaster splint, where it was left without further treatment for a period of five weeks. At the end of that time the splint was removed, passive motion instituted, and the recovery was so perfect that it is impossible at this time to tell which arm was injured.

CASE II.—On July 6th, 1878, Ernest L., aged 6 years, jumped from a rapidly moving grocer's wagon, fell in such a manner as to cause a separation of the epiphysis of the lower end of the right humerus, from the dyaphysis, and breaking the epiphysis into two portions, by a fracture extending into the joint.

The treatment in this case was similar to the last, the arm being placed in a plaster splint, after coaptating the fragments, and there retained six weeks. At the expiration of that time, the splint was removed, and passive motion instituted. Pronation and supination were perfectly restored, but flexion and extension, though very good, lacked, probably, one-eighth of the full motion the arm had previous to the injury.

CASE III.—On July 1st, 1879, I was summoned to Cale, I. T., to attend Johnnie R., aged 8 years, who had been thrown from and tramped upon by a horse. In this case I found the condyle broken

from the shaft of the humerus, broken into two fragments, the external condyle forced through the skin, and at another opening through the skin, a portion of the boy's shirt was forced into the joint by the horse's hoof.

The shirt having been removed, and the wounds cleansed of all foreign matter, the arm was placed in a plaster splint, and there left for five weeks.

With passive motion, the use of the joint was fully restored. The coaptation of fragments, in this case, was not as perfect as could be desired. They were reduced to their proper positions, but became slightly disarranged in the application of the splint. This had the effect of slightly advancing the inner condyle from its proper position, but had no noticeable effect on the motion of the joint.

CASE IV.—On Dec. 1st, 1882, William D., aged 24, a resident of Colbert, I. T., while sleeping with a party of hunters, touched the hammer of a shotgun with his toe, and discharged the contents of the gun into the right elbow joint. Examination revealed a ragged wound over the back of the inner condyle as large as a silver dollar, containing cloth, grass and wadding. The olecranon process of the ulna was shattered, but fortunately, neither the articulating surface of the radius nor humerus was touched. The original wound was enlarged, cleaned, the olecranon process amputated, and a plaster splint applied along the outer and anterior portions of the arm, which was placed in a semi-flexed position.

There was considerable fever present for a week, which subsided under the administration of quinine and opiates.

On Feb. 9th, 1883, ten weeks after the accident, the patient came fifteen miles to my office.

There was still a slight discharge from the joint, but with that exception, everything in the general and local condition was as could be desired.

The joint was of course anchylosed, both flexion, pronation and supination being lost. Outside of this loss of motion, he retained a very serviceable arm.

In cases III. and IV. it is hardly necessary to allude to antiseptic precautions. In both cases they were undertaken at the commencement of treatment, but were discontinued, or so imperfectly carried out during its course, that little credit can be attributed to them.

INJURY TO THE KIDNEY, WITH RUPTURE OF ITS TISSUE.

CASE V.—On July 31, 1882, Jno. G., blacksmith, aged 40, received a gunshot wound, the ball entering about two inches to the right of the spine, opposite the second lumbar vertebra, ranging upwards, and was cut out about three inches above, and to the right of the lower end of the breast bone.

No probing or manipulation whatever was resorted to beyond the mere extraction of the ball.

The wounds were dressed with a two per cent. solution of carbolic acid.

The course of the ball was not positively known, whether in a direct line from entrance to exit, or around near the surface, but from inspection, and judging from the muscular tissue in sight in the wound of entrance, it was suspected that its course varied very little from a direct line.

This injury was followed by very profound shock, attended with vomiting, cold, clammy skin, great anxiety, and feeble pulse. On the morning succeeding its reception, no urine having been passed, the catheter was introduced, and after withdrawing it several times, to clear the eyelet of blood-clots, I succeeded in drawing off a copious supply of bloody urine.

He passed his urine naturally after this, until the 18th of August, nineteen days after the reception of the wound.

His urine remained bloody for two days, and then became clear, but with a little pus and mucus at the bottom of the vessel.

August 18, several days after the urine had become normal, he was seized with a chill, and following this was a copious hemorrhage from the bladder.

This was followed, on August 21st, by a still more copious hemorrhage, unattended by any chill.

Following this was some pus and mucus discharged for several days, gradually disappearing until the patient was perfectly restored.

CASE VI.—On December 28, 1882, Geo. S., of Caney, Indian Territory, age 26, white, section hand, while loading steel rails was knocked off the car by one of the rails, which fell upon him, striking him on the left side, just above the crest of the ilium, from the umbilicus to the spinal column.

On the morning succeeding this accident, being unable to urinate, the catheter was introduced, and after withdrawing it several times, to

elear it of blood-clots, a free flow of bloody urine was secured.

During the remainder of that and the succeeding day there was no reappearance of the hemorrhage, and there never was any necessity to again use the catheter.

On the third day after injury the urine began to assume a reddish bloody character, much like the washings of bloody meat, and attended by a little pus and mucus.

The pus gradually increased in quantity for three days, and then gradully diminished, entirely disappearing on the 20th of January, 1883, twenty-two days after the reception of the injury. During its entire continuance it was attended by the sanguineous urine.

In both cases, V. and VI., there was undoubted rupture of kidney tissue.

A CASE OF DIPHTHERIA FOLLOWING MEASLES AND SCARLET FEVER.

During the month of August, 1883, Alice P———, Norwegian, aged 6 years, en route to America, was overtaken with scarlet fever, and detained in a hospital in England until able to travel. Two other children belonging to the same family were attacked with the disease at the same time.

During the month of November they resided a short time in Chicago, and in December came to Denison, Texas.

When first seen, the hands of Alice were of that extremely red color noticeable after desquamation, while one of the other children had two running sores on the neck from suppurating glands. Alice was also suffering with a well marked case of measles; sneezing, coughing, eyes red and watery, and a well marked eruption over the face, neck and upper portion of the chest, which gradually faded out, disappearing at the middle of the thorax.

By the end of the second day this eruption had entirely disappeared, never having extended to the lower portion of the trunk. On the morning of the third day some complaint was made of the throat, and inspection revealed diphtheritic patches covering both tonsils and a portion of the soft palate. On the fourth morning the diphtheritic membrane had been broken up in its original location so as to permit the mucous membrane to be seen through it in various places, but had extended so as to cover new tissue up into the nasal cavity, over the entire pharynx, and down towards the larynx.

During the afternoon the extension downward began to seriously interfere with respiration, and by 6 p. m. it became evident that all

remedies resorted to had been powerless in checking the progress of the disease. At 10 p. m. the mother consented to an operation. At this time the respirations were 40 to the minute, pulse 140, and temperature 105 ° F.

With the assistance of Dr. D. White, the little patient was put under the influence of the anæsthetic, and the operation proceeded with.

Twice during the progress of the operation we were interrupted for the purpose of rallying the life of the child, and after the tube was finally in the trachea, it was a struggle for fifteen or twenty minutes to keep the tube from becoming choked with the diphtheritic matter coughed up. In an hour after the operation, the pulse had fallen to 120 and the respirations to 20. Thereafter there was no difficulty with the respiration.

On the succeeding evening there was an increase in temperature, and a very rapid, weak pulse, reaching 140. With this one exception, all symptoms were acceptable. The child took sufficient nourishment, breathed easily, slept abundantly.

At 4 a. m. on the fifth day, the child took a drink of water, was apparently doing as well as ever, but died at 6 a. m., without a sound or a struggle, thirty hours after the operation, of cardiac paralysis.

SECTION ON GYNÆCOLOGY.

LACERATION OF THE PERINEUM.

BY C. W. LEGRAND, M. D., HEMPSTEAD, TEX.

LACERATION of the perineum is frequent in rapid delivery; for when the child is forced rapidly, either by nature or artificially, as in forceps delivery, the external parts have not sufficient time to dilate, and the perineum is frequently forced to give way to a certain extent, so that the head may pass, more especially in first labors. We very seldom find the perineum ruptured in multipara. In fact, in first labors the accident is a common one to a limited extent, though not very grave, unless the sphincter ani or the rectum become implicated, or the perineum is involved to a great extent; then the pelvic organs lose their natural support, and are prone to fall. We then may have rectocele, or cystocele. There is no cause to believe the accident is owing to any fault of the accoucheur, for we frequently find it resulting in the practice of the most learned and skillful practitioners, as well as in the practice of the common and unlearned midwives. When the laceration is but slight, surgical assistance may not be required. But when the rupture extends into the body of the perineum, and we recognize the accident, we should remedy it immediately by inserting two or more sutures at once, and drawing the raw surfaces together. Such practice cannot be too urgently recommended. Though, should we let the opportune time slip by, we should then wait until after the period of lactation and the general health of our patient is restored, as we well know that a mother, while nursing her infant, is very much reduced, and not in proper condition to undergo such an ordeal as is required to repair a ruptured perineum. Moreover, the operation

being a plastic one, good power on the part of the patient, and immediate union, are requisite for success.

CASE I.—Was called March 21st, 1883, to see S. D. (colored), aged 17 years. Found her with ruptured perineum, accompanied with prolapsus uteri. On questioning her, learned that she had been delivered on the 18th of October previously (1882), being a few days over five months. She was in labor forty-eight hours, and was delivered with forceps.

The lesion extended down to, but not including, the sphincter ani. Gave her a purgative, preparatory to the operation, the next day. Chloroform being given by an assistant, the patient was brought before the window for good light, and placed in lithotomy position. Sim's speculum being introduced, I replaced the uterus to its proper position; then pared the sides of the ruptured parts, taking away the entire mucus membrane, making a raw surface of about one and one-half inch in extent, of rather triangular shape, on both sides. I then inserted three sutures, using double cobblers silk; the sutures thus in position, all blood was sponged away. The quill was placed in position on the left side, and by drawing firmly, the two raw surfaces were thus brought together, and the quill on the other side was put in place, and the sutures firmly tied. Three superficial sutures were inserted through the skin, preventing any gaping of the wound. Morphine, 1-6 grain, was given, and ordered 1-6 grain to be repeated every six hours, for three days, after which time bowels were moved by enema of warm water and soap. Ordered her to keep her bed, dorsal decubitus, with hips elevated, vaginal injections three times a day, carbolic solution, of strength ten per cent., and bladder to be emptied as often as nature required. At the expiration of the sixth day, sutures were taken out, and patient ordered to stay in bed six days longer, after which time she was allowed to get up and walk about the house. She has had no trouble whatever. Restoration is quite satisfactory.

CASE II.—Was called June the 10th, 1883, to see Mrs. R. (white), aged 22 years. On examination, found complete rupture of perineum, involving sphincter ani, destroying the entire recto-vaginal septum for the extent of one and one-half inch, accompanied with prolapse of rectum and procedentia uteri. Patient had no control over bowels, fæces would pass involuntarily; thus she was rendered loathsome to herself and family. She had fallen off in weight from 120 to 90 pounds. Was informed by husband that wife was ruptured in giving birth to her

first child, some seven years ago, when she was but 15 years old; had had two other children since.

After discovering the extent of the laceration, I was almost deterred from undertaking the case, but the earnest solicitations of the patient and her husband prevailed, although I warned them that I could not assure them of success.

She was under care of Dr. ———, who, being cognizant of the fact that I would perform the operation on the day above named, he had the patient fully prepared.

Chloroform being given, patient was placed in lithotomy position. I then introduced Sim's speculum, large size, which brought to my view plainly the work I had before me. I replaced the rectum and uterus as well as I could. I then pared the sides of the perineum entire of its mucus membrane, up to the very bottom of the rupture, making an extremely large raw surface one ither side. Using Peaslee's needles, I introduced three deep sutures, using double cobblers silk. The quill was placed in the loops of the sutures on the right side, the raw surfaces were brought close together, the quill was then placed in position on the left side, and the sutures firmly tied over it, thus holding the parts firmly in opposition. Three superficial sutures were inserted to hold the superficial parts together. Patient was then allowed to pass from under the influence of chloroform. Then gave ¼ grain morphine, and ordered 1-6 grain to be given every four or six hours for the next four days, in order to keep the bowels quiet.

At expiration of the fifth day, bowels were moved by the use of warm water and soap enema, after which the bowels were moved once a day by enema. During these days the patient was made to lie on her back, with hips elevated, and warm vaginal injections of eight per cent. solution carbolic acid used three times a day regularly, bladder being emptied with catheter regularly every four hours. At the end of eighth day the sutures were withdrawn, patient ordered to keep her bed for ten days longer, still using vaginal injections, at which time she was allowed to get up and walk about. The last time I heard from her she had regained her usual weight, 120 pounds. Her husband told me that I would not recognize her as the same patient that I operated on six months ago; says the cure is perfect.

REPORT OF A CASE OF FIBRO-CYSTIC TUMOR OF UTERUS.

BY J. C. B. RENFRO, M. D., LA GRANGE, TEX.

MRS. W., aged 64 years, mother of six children, health generally good up to present attack, rather corpulent before attack, came to me to be treated on April 7th, 1884, for some uterine trouble, she did not know of what character, only a constant oozing of blood from uterus for six months previous. Made a digital examination on the evening of arrival, which produced considerable hemorrhage, she having come twenty-four miles in a vehicle and was somewhat fatigued. I desisted from thorough examination of the case, satisfied, however, that I had a tumor of some character to contend with. I made known the fact, and informed her that an operation would be necessary in order to remove the tumor. She readily gave her consent after full explanations were given. I appointed next day, at 9 a. m., for the operation. I ordered in the meantime, vinum ergotæ fl. ʒ i, every four hours until time for operating; gave this to secure strong contraction of the uterus and prevent so much hemorrhage during the operation.

I repaired to the place at the appointed time, with my colleague, J. W. Smith, M. D. After both of us making a thorough examination of the case and becoming satisfied that we had a fibro-cystic tumor of considerable size to contend with, its weight being about one pound, and finding the entire os uteri involved from external to the internal os with entire posterior lip and right lateral half of anterior lip, to the extent of three-fourths of an inch, I proceeded to operate, being assisted by J. W. Smith, M. D., who rendered efficient service throughout the operation. After removing all of the redundant mass externally, and the os uteri brought to view, I proceeded to remove all the growth from the os with the curette as far as it was involved, scraping the parts thoroughly. The uterus being well drawn down with the vulselum forceps and tenaculem, I proceeded to amputate posterior ilp of

uterus entire, with right half of anterior lip to the extent of three-fourths of an inch, all of which was involved in the mass. The operation being ended, the parts were thoroughly cleaned with warm water, and hemorrhage checked with Monsels' solution of iron. The vagina was packed with absorbent cotton, and the patient put to rest. The operation produced but very little shock to the system, she rallying and resting well through the night.

Twenty-four hours after the operation, the packing was removed and the parts thoroughly cleaned with warm water, all oozing of blood having ceased entirely. No uterine pain or elevation of temperature; patient resting well and cheerful. No anæsthetic was used in the operation (she being opposed to taking it), but one-half hour before operating, gave her ½ gr. of morphæ sulph. hypodermically.

I should have stated before that the patient had never had any uterine pain whatever, only weakness and dragging down in the back, with hemorrhage.

The after treatment consisted of tonics and local dressings to the neck of the uterus. The dressing was a compound of acid tanic ʒ ij, tinct. iodine fl. ℥ ss, glycerine (pure) fl. ℥ vi, to be applied on absorbent cotton once daily, after cleansing parts thoroughly with warm water.

Up to present writing, twelve days since operation, patient is doing well. There is constant improvement; she walks around in her room and takes her meals at the table, and there is every prospect of speedy recovery. I could prolong this report, but believing in brevity, desist.

A CASE OF OOPHORECTOMY.

(Tait's Operation.)

MRS. L., American, white, aged 38, married, house-keeper, nullipara, small stature, good figure, hair and eyes black, the eyes remarkably brilliant; had suffered for five years with periodical attacks of insanity, the periods coinciding with the menstrual epoch. Sometimes the insanity would continue for two months, at other times for a few days only. Latterly she became suicidal and on several occasions took large doses of morphine, as much as a drachm at a time, which had only the effect of making her sleep for four or five days, at the end of which time she would awake in her right mind. At menstrual periods she complained of pain in the region of the ovaries, especially severe on the right side; the flow was always scanty; she also had violent pain in the head. In April, 1883, she placed herself under the professional care of Dr. L. G. Lincecum, of Lampasas, Texas, who treated her with tonics, alteratives and sedatives, but without benefit. On June 13, 1883, ten days after the cessations of the menses, Dr. Lincecum, assisted by Drs. P. S. Jenkins and F. R. and C. M. Ramsdell, performed the following operation: The patient was placed upon a small table and anæsthetized with washed sulphuric ether. An incision was then made in the *linea alba* about two and half inches long, midway between the umbilicus and pubes, through which the left ovary was reached and removed, together with its fallopian, tube.

The ovary presented but little appearance of disease, being possibly, slightly enlarged and rather softer than natural, but the tube showed marked softening, which subsequent examinations proved to be due to fatty degeneration. The pedicle was transfixed with a double ligature of carbolized silk, tied in two sections, and after cutting the ligatures short, dropped back into the peritoneal cavity. Some difficulty was experienced in finding the right ovary, and when reached it was found

to be so firmly bound down by inflammatory adhesions that it was impossible to bring it into the external incision. The cut was therefore extended downward to the pubes, regardless of the hemorrhage, when, by using considerable force, the organ was brought into view, the fallopian tube and ovary both removed as on the other side, the pedicle ligated in a similar manner, except that in addition to transfixing, a strong ligature was thrown around it *en masse* on account of very free hemorrhage which took place when the tube was divided, even after the transfixing ligatures had been tied. [The ovary was enlarged, inflamed and contained a fresh corpus luteum. The Fallopian tube was very much inflamed, enlarged and filled with pus.] The division of the pedicles was made with a pair of uterine scissors curved on the flat. During the efforts to draw out the right ovary a severe fit of vomiting came on and the intestines were forced out in spite of efforts to retain them, until nearly the whole of the small intestine was outside the abdominal cavity. When the vomiting ceased they were returned by careful manipulation, and after the ovary had been removed the whole cavity was sponged out with fine sponges washed in carbolized warm water. Five interrupted sutures of carbolized silk were then introduced, the entire thickeness of the abdominal walls being included, peritoneum and all, and the edges of the wound still more accurately coaptated by means of strips of diachylon adhesive plaster applied between the sutures, and a compress of soft cotton cloth wrung out of carbolized water placed over the wound and retained by a bandage passed around the body. The wound united by the first intention, but on the fourth day a severe fit of vomiting caused a reopening of the superficial portion for about two-thirds of its extent. The peritoneum remained intact, and there never was any discharge from the abdominal cavity, and only a slight formation of pus in the external wound after the rupture mentioned. On the fifth day the temperature reached 103½° F., but was soon reduced by aconite, opium and ice. For three or four days after the operation a thin bloody discharge, mixed with a little mucous came from the uterus, and there was pain in the region of the ovarian stumps for several weeks. On the 29th day she was able to dress and walk about the room. Her recovery was complete, and up to last February, eight months after the operation, there had been no return of the insanity, so that in all respects the operation may be counted successful.

A CASE OF OVARIAN CYST.

BY NATHAN BOZEMAN, M. D., NEW YORK CITY,

Dr. Brown, President T. S. M. A.

MY DEAR SIR—I received your circular setting forth the time and place of the next meeting of the Texas State Medical Assocaition. I would like to attend the meeting, but this is out of the question. I herewith send you a short account of a most interesting case of ovarian cyst, with rare complications, which came under my observation some weeks ago, and underwent the required operation.

Mrs. H, of Haverstraw, New York, aged 26, mother of six living children, the last having been born November 27, 1883, after a labor of half an hour's duration. Four days after the birth of the child she discovered a cnnsiderable enlargement in the lower part of the abdomen. Soon the enlargement began to increase rapidly, and the physician in attendance pronounced it abdominal dropsy. Under this belief he performed paracentisis two months later (the latter part of January) and drew off a large pailful of fluid of a grayish color.

When the patient presented herself to me, through the recommendation of my friend, Dr. John Burke, of this city, (she having nursed her child up to this time) I found her with a large ovarian cyst of the left side, and an abdominal girth of forty-one inches. She was sent direct to the Woman's Hospital and admitted into my service.

In my operation March 14, the usual short incision was made and the cyst evacuated. Upon drawing the partially collapsed cyst through the abdominal incision, the omentum and four or five coils of the small intestines came with it, both adhering firmly to the upper cyst wall. The interesting feature of the case was, the detachment of the omentum and intestines from the cyst. Being aided by Drs. Talbot and Bayley, my assistants, I proceeded first to separate the omentum, and secondly, the intestines. The former step was easy, but the latter was

attended with unusual difficulties. Here, after proceeding to a certain extent in the separation of the intestines I came to a point where further progress was impossible, as indicated by the exposure of the muscular coat of a coil of intestine. To continue further this dissection, the opening of the bowel would have been inevitable. Desisting from this, therefore, I decided next to open the cyst and cut away its walls all around to the vicinity of its adherence to the intestines. This having been accomplished it was found that the attached portion of the cyst wall was extensively calcified, the concretion presenting itself in broad and hard plates. With the observance of this second complication I carefully split the cyst wall, thus leaving its peritoneal surface adhered to the intestines as before described. In this I succeeded beyond my expectation and thus entirely cleared the abdomen of an offending body which otherwise would have endangered the success of the operation and consequently jeopardized the life of the patient.

After the ligation of one small artery upon the denuded point of the intestine mentioned, and of three or four portions of the omentum, I was enabled to complete the remaining stages of the operation without difficulty; namely, the division of the pedicle and the closure of the abdominal incision. The pedicle was pierced with a double carbolized and waxed ligature, and its cut surface cauterized with Pecklan's cautery. The abdominal wound was closed with silk ligatures, which I greatly prefer to silver wire.

The entire operation was performed under antiseptic precautions and the duration of it was one hour and a half. The patient towards the last became somewhat exhausted, but a couple of hypodermics of brandy soon brought her pulse up, and she was placed in bed feeling quite comfortably.

My usual after treatment was commenced an hour later (see the Medical Record, July and August, 1879). This consists, briefly stated, in the employment of rectal enemata, every six hours, of

℞ Beef juice,
Quiniæ Sulph.,
Liq. Opii Comp.,
Acidi Sulph. Aromat. m.

To the above are added, according to circumstances, brandy and tincture of digitalis. The quantity of brandy should not exceed half an ounce at a time, as a larger dose is liable to irritate the rectum. The objects of these enemata are for the time being to quiet the patient and

support the system, thereby relieving entirely if necessary the stomach from medicine and food. Four to six days will usually suffice for their employment. Quininism is produced generally about the end of forty-eight hours when the quantity of quinine is to be gradually lessened and is finally suspended when the pulse and temperature become normal. When the tendency of these is upward the rule is of course to continue the enemata longer in the proportions stated. The antipyretic power of quinine under such circumstances I hold in high favor as may be seen by reference to the paper quoted.

Up to the fourth day in the case reported, the pulse and temperature remained almost normal and the patient scarcely complained of an ache or pain and had only a little nausea and vomiting the first day or two. Even on the day indicated the temperature only reached 101 2-5 and the pulse scarcely 100. On the eleventh day the abdominal sutures were removed, and with the exception of slight suppuration at one or two points in the line of union, the result was all that could be wished. There is every indication now that the convalesence of the patient will be rapid and complete,

The two points of practical interest in the case are the adherence of the omentum and intestines to the cyst wall, and the indirect mode adopted of removing the calcified portion of the cyst, thus leaving the peritoneal surface in its abnormal relations with the intestines.

SECTION ON OPHTHALMOLOGY.

FOUR CASES OF COMPLICATED, CHRONIC OTORRHŒA, TREATED BY THE DRY METHOD.

BY GEO. P. HALL, M. D., GALVESTON, TEXAS.

THE treatment of chronic suppurative diseases of the middle ear according to the antiseptic or so-called dry method, has certainly marked an important epoch in the history of otology. That it is greatly superior to the old or moist method is now beyond question, if we are to accept as of any value the experience of the leading otologists in all parts of the world. Owing to the anatomical configuration of the tympanic cavity, a purulent process once established has a peculiarly inviting field for permanent residence. According to the researches of Ogston, Cohnheim* and others, it would seem that the formation of pus is the result of parasitic invasion of the tissues, especially by micrococci. In these cases where, through a perforation in the m. t. the middle ear cavity is in open communication with the atmosphere, the presence of bacteria seems especially invited, and the conditions perfect for the formation and decomposition of purulent products. The antiseptic treatment, then, in virtue of its power to check sepsis, to limit pyogenesis, and to prevent the presence of microphytes, ought—according to the scientific theory of the day—to be, par excellence, the treatment, and so I believe it is.

It is not my purpose, in this paper, to discuss the merits of the dry treatment, as applied to the uncomplicated cases of chronic otorrhœa, but to present, instead, the more salient features in the history of four cases in which this disease was complicated by the presence of granulations, mucous and fibrous polypi.

CASE I.—M. S,, from the interior, age 8, was brought to me by her

father, who is a physician, for treatment of a chronic otorrhœa of two years' standing, dating from a severe attack of scarlatina. Nothing in the way of treatment had been done other than to use carbolized washes to cleanse the parts when the discharge became offensive. The general condition of the patient was excellent. The discharge was profuse and offensive. After thoroughly cleansing with warm water and drying with absorbent cotton, inspection showed a large perforation in each rut. The mucous membrane, in both cavities, was found to be studded with granulations, and on one or two small polypi were present. H. D. R. & L.=c-24. Eustachian tubes were easily inflated; the post-nasal space in a state of chronic inflammation. In this case I had the valuable assistance of my friend, Dr. B. A. Pope, of New Orleans. The dry treatment was used, all secretion being carefully wiped out with a tuft of absorbent cotton, on the end of a probe; the middle ear was then inflated, and, after removing any further secretion which might be discovered, the impalpable powder of boracic acid and resorcin, according to Burnett,† was blown on the diseased surface, packed in and a pellet of cotton pushed down on it. The discharge became almost nil after two weeks, and in one month had ceased entirely. On inspection no trace of either granulations or polypi was discoverable; the perforations, though not closed, were much smaller, while the H. D. in each became 1-24.

CASE II.—Miss E. M. from North Texas, age 17, has suppuration of both middle ears, of ten years duration. H. D. R. 1-24, L. 3-24; eustachian tubes pervious; has some nasal catarrh. Secretion is scant. In L. a good sized perforation was found, and lying in the cavity, on its floor, was a small mucous polypus. A similar condition existed in R., the perforation being smaller, while the discharge was more profuse. The local application of dry powders, as in case No. 1, was continued for three weeks, with the effect of diminishing, but not stopping entirely, the discharge. This treatment was then discontinued, and a solution of boracic acid in alcohol substituted. Under this the polypi became paler and perceptibly smaller. In one month I again changed to boracic acid and resorcin. At this time the growths were about one-half their original size, and the discharge reduced to a minimum. After one application of the powder to L. and three to R. all discharge ceased. In fifteen days after no foreign growth could be detected in either ear. Subsequently both perforatons closed, and the H. D. became, in R. 3-24, L. 8-24.

CASE III.—P. R., age 19; had yellow fever, in Havana, when three years old, and says the double otorrhœa dates from that time. Has chronic naso-pharyngeal catarrh, with some adenoid vegetations of the pharyngeal vault. H. D. R. c-24, L. p-24; discharge slight in both. In L. a small perforation was found; in R. a large one, with a growth in plain view. This proved to be a mucous polypus, with a broad base The m. t. in its superior segment, was covered with granulations. E. tubes pervious. After one application to L. all discharge ceased, and the perforation soon after closed. In R. the granulations rapidly disappeared, the secretion became greatly lessened, but the neoplasm seemed unaffected. The alcohol treatment was then pursued, for a while, with the effect of diminishing the size of the tumour, but this process finally seemed to come to a standstill. I again used the powder, making three applications in as many weeks. The discharge was promptly checked, and on examining the ear at the end of the fourth week, found the canal perfectly dry, no trace of the growth, and the perforation evidently closing. H. D. became, in R. 6-24, L. 8-24. The perforation finally became quite small, but never entirely closed.

CASE IV.—J. G., from South Texas, age 12; says he had "brain fever" seven years ago, since which time his L. ear has been discharging. He suffers, at present, from chronic malarial toxæmia. Says his ear has been treated frequently, and he was finally told that "if the discharge were stopped it might go to his brain and prove fatal, but if he would let it alone he might outgrow it." On inspection I found the ext. auditory canal so swollen that only a narrow slit-like aperture existed. It was, of course, impossible to determine the exact condition of the tissues further in. The discharge was profuse and offensive; the walls of the canal somewhat "boggy," and covered with granulations. A little more and there must have been complete closure of the canal, with retention of pus and its dangerous sequences. No air could be driven through, with either bag or catheter. In this case I used a warm solution of bicarb. sodium to cleanse the canal as thoroughly as possible. After drying it as well as I was able to, brushed a 100 gr. solution of nitrate silver over the swollen, granulating surfaces. Subsequently I introduced a short bit of rubber tubing, as large as the calibre of the canal would accommodate, allowing it to remain in during the intervals between visits, and increasing the size of the tubing gradually. In ten days I had the satisfaction of seeing the canal restored to nearly its normal size. I then found the entire m. t. swept away, the ossicles

gone, and springing from the promontory was a fibrous polyp, with a broad base, some larger than an English pea.

The E. tube was catheterized, the parts cleansed, and the boracic acid packed in gently but firmly, and a plug of borated cotton pushed down on it. This treatment rapidly minimized the formation of pus, but caused no change in the tumour itself. Alcohol and silver nitrate, according to Knapp,‡ was then tried, for a reasonable length of time, without apparent effect. I again commenced the dry powder, packing the cavity as before. On the 18th day after the last change, I decided to explore the cavity again, the discharge being almost nil, with a view to removing the growth, but great was my surprise to find it already very much smaller. Of course, I continued treatment, and after a few more applications the growth atrophied and finally disappeared altogether. It is almost superfluous to say that the hearing was not improved.

No mention is made as to treatment of throat and nose complications which existed in these cases, inasmuch as—though regarded as positively essential to the success of my plan—it was not thought to have a specific bearing, over any other, on the plan in use. Not a few, who are regarded as authorities on otology, have asserted that the dry method is applicable only to the simple cases of chronic otorrhœa. On the contrary, others claim that it is sometimes successful in the most complicated cases. There are different views as to what constitutes dry treatment. The combination of boracic acid with alcohol was, I believe, introduced by Loewenberg, of Paris, he believing it to be a more effective germicide. It is usually classed under the head of dry treatment. Some use the syringe steadily for cleansing the tympanic cavity. Often a syringe is quite indispensible, but I believe, where all secretions can be effectually removed with absorbent cotton, that the latter is, by far, the better plan, as it seems to leave the mucous lining of the cavity in a condition decidedly less favorable to the formation of granulations, polypi, etc.

The limited number of cases reported in this paper, while too small to allow the formulation of positive conclusions as to future or continued success, are of positive value so far as they go. At the risk of being considered hasty in deducing inferences, after a study of the above cases I believe I have some warranty for the expression of the following opinions:

1st. That the alternate use of alcohol and some antiseptic powder is

much more likely to be effective than the use of either agent alone.

2d. That the alcoholic treatment, even when partially or totally unsuccessful, changes the condition of the diseased surface to one peculiarly favorable to the successful application of antiseptic powders.

In conclusion, I will say that, notwithstanding the dry method is advised chiefly in simple cases of chronic otorrhœa, in all the more recent text-books which I have seen on this subject, it is my belief that it will undoubtedly obviate the need of surgical interference in not a few cases in which, a short while back, the latter would have been rightly considered a necessity.

*Belfield: The Relations of Micro-Organisms to Disease.

†℞. Resorcin, ʒi.
Acid Boracic, ℥i.
M. bene.
—Burnett in Am. Jour. Med. Science, Jan. '83.

‡Arch. Otology, Sept. '83.

THE BRIDGE OPERATION FOR TRICHIASIS, OR INVERTED EYELASHES.

BY JAS. A. COX, M. D., WILLS POINT, TEXAS.

IN any well developed case of this disease, the damage that is done is readily seen, and the damage that may be done can be easily imagined. If in any affection an ounce of prevention be worth a pound of cure, it is certainly true in this.

Thousands have lost their vision through the irritation of "wild hairs," and thousands are now slowly going blind from the same cause. This sad result obtains even among our best and most enlightened communities.

It does seem that the inconvenience, pain and trouble produced, the increased lachrymation, the constant secretion and gathering of mucus about the edges of the lids, and the rapid and great loss of vision, would spur patients up to the point of seeking relief.

I cannot conceive why they are so negligent; but my experience has been that they ask assistance only after years of suffering, and when the sight has become so dim as to prevent them from attending to their ordinary duties.

This disease is amenable to, and curable by, surgical treatment; but there would be no necessity for the disease nor the surgical procedure (except in cases of accident) if the people had a proper appreciation of inflammations of the conjunctiva, and had them attended to during their early stages.

Trichiasis most commonly follows purulent conjunctivitis, traumatic conjunctivitis from burns, explosions, injuries and wounds, and granular lids.

The severer and chronic forms of conjunctival inflammations may often be traced back to the simpler and acute forms, which yield readily to treatment.

It is vain and useless, however, to speculate upon possibilities. We all know that we must take our patients just as they are when they present themselves to us. Pulling out the lashes with the forceps will only give temporary relief. They soon grow out again, and excite the same pain and trouble. After they have been extracted many times, the follicles are injured to such a degree that only fine and colorless hairs grow, and the lids look scalped and bare. These colorless hairs produce a great deal of irritation, and are often overlooked.

Many operations have been devised to cure trichiasis, as has been done for the relief of every disease requiring surgical aid.

I wish to speak of only this one, the bridge operation, which, I think, promises more certainty than any operation I have ever seen done for this affection. The operation is a modification of Arlt's, and the credit of it is due, I believe, to Dr. C. R. Agnew, of New York City.

Make an incision, beginning as near the inner canthus as the faulty lashes require, avoiding injury to the punctum and lachrymal canal, and about two lines above the row of lashes, through the integument, and as far on a straight line toward the outer canthus as necessary. Now, make a semicircular incision above, from one terminal point to the other of the first incision, to include the amount of tissue desired to be excised. Carefully dissect away the integument included between the two incisions. Make the third incision then, along the free edge of the lid between that portion of the lid containing the lashes and their follicles, and that containing the meibomian glands and their ducts. This incision, which may be made at the option of the operator, with a Graefe's knife or a pair of iridectomy scissors, should extend through to the wound above, making a bridge of the tissue containing the lashes and their follicles, which is to be slided up or transplanted, if you please, to a higher plane than it at first occupied. Sutures are then introduced, fastening the bridge to the integument above the line of the semilunar incision. This operation raises the lashes, and at the same time rolls them out.

CASE I.—Miss E. L., age 20. Trichiasis; both. Very nearly the whole row of lashes of upper left lid lie constantly on the eyeball. Most of the lashes of the right lid are inverted. Pannus and opacities of both corneæ. Constant irritation and abundant lachrymation.

Rv., 15-100; Lv., 7-200.

May 23, 1882—Put patient under ether. No vomiting. Did bridge operation on both upper lids.

May 25—Sutures removed. Lashes of both lids well turned out.

June 22—Rv., 20-100; Lv., 20-100.

Aug. 21—Some three or four lashes at the outer canthus of each eye turn in slightly. The cartilages of both upper lids are incurvated. A cantholysis was done on each, while the patient was under ether.

Aug. 23—Sutures removed.

This patient has had no more trouble.

CASE II.—Miss A. B., age 18. This case was not so aggravated as the other. The same operation was done on both eyes. A cantholysis has not been required. It is now nine months since the operation, and she remains well.

We used chloroform instead of ether with her. I have seen the operation done twice before, with excellent success as to the final result; but, in one, there was sloughing of the central portion of the bridge. This produced a slight deformity.

I believe there is no greater risk of sloughing in this than in the other operations for trichiasis, and that the cushion of tissue left by sliding up the bridge is a greater protection than any of the other methods possess.

A CASE OF TEMPORARY NEAR-SIGHTEDNESS, CAUSED BY A CARIOUS MOLAR.

BY GEO. P. HALL, M. D., GALVESTON, TEX.

C. S., AGED 30 years, became uneasy about what seemed to him a very peculiar condition of his eyes, and applied for relief, with the following history, viz: Three days ago he began to suffer from a severe toothache, which has continued intermittingly up to date, the exacerbations of pain being much worse at night. On the first day, not long after onset of the dental neuralgia, he noticed that familiar objects at a distance which he was accustomed to see with perfect distinctness, appeared to be getting hazy in appearance and indistinct in outline. In reading, he saw with perfect distinctness, and thought the type looked larger than usual, but was compelled to bring it up nearer to the eye than was his habit to do so. He complained of no pain or other unpleasant sensations about the eye. He had headache for the past two days, coming on towards night, but disappearing during the night. His sight was 15-200 in each eye, which became 20-20, or normal, upon the addition of a spherical concave lens of 2.50 dioptric. The range of accommodation was considerably reduced; pupils small, but not immovable. The ophthalmoscope seemed to reveal about the same degree of myopia indicated by the glasses, with no other abnormity. Suspecting from the peculiar history given, that this was a case of tonic spasm of the ciliary muscle, and that the myopia existing was apparent, not real, I instilled a 4-gr. solution of homatropine hydrobromate in each eye. In forty minutes S. in each became 20-30 without any glass, and 20-20 with a very weak concave. Later on, the effect of the mydriatic was lost, and the refraction again became apparently myopic to about the same degree. The offending molar was now removed by the dentist. In thirty-six hours after, I again tested the refraction, and found S. normal. On using a mydriatic, a low degree of hypermetropia was revealed, amounting to 1-36.

ORGANIC ENTROPION AND DISTICHIASIS.

BY R. H. CHILTON, M. D., DALLAS, TEXAS.

AMERICAN surgeons of to-day have no superiors, and American surgery no longer follows, but is actually leading. We no longer look to Europe for ideas, but are giving them results, as proof of having improved and perfected, as well as discovered operations far better than those in use by European surgeons. The subject of this paper is an example.

For many long years the operation for entropion was very imperfect and unsatisfactory. Not only this, but so extensive were the incisions, that we often had sloughing as a result; and still oftener, the mortification of a failure, unless we made the second, and sometimes even the third operation for its complete relief, if we succeeded at all.

Entropion is generally the result of long standing inflammation of the conjunctival membrane, trachoma, or the use of caustic applications to the lids. The changes produced by these troubles and resulting in the curvation of the lid, are: first, cupping and cicatrization of the tarsus, and atrophy of the inner edge of the border of the lids.

Distichiasis may be a result of a disease of the edge of the lid, such as blepharitis marginalis, etc., and not dependent on either cicatrization or atrophy of the border of the lid. Yet the object to be attained by the operation for entropion, viz.: to remove any cilia that may be jagging or otherwise irritating the eyeball, applies to misdirected cilia in distichiasis. That is, the same operation is necessary for their relief.

The operation for organic entropion and distichiasis, as practiced by Arlt and others, with their various modifications up to the present date, is not only unsatisfactory, but unsightly, often so mutilating the lid as to leave it very badly scarred, and still worse, though the lid be small, the cutting was so extensive and painful as to require anæsthesia in all instances, if justice was done the patient. Hotz, of Chicago; Green,

of St. Louis, and others, have so far, perfected several different operations for the relief of this annoying trouble (annoying to the surgeon and destructive to the patient), as to give us no better results than any laid down in our text-books. And, I have about concluded that, with proper care, all the ordinary cases of organic entropion and distichiasis can be cured. I do not confine myself to any particular operation, but combine the operations of several surgeons, as best suits the particular case. Burow's operation of cutting through the scar on the conjunctival or inner surface of the lid, was in the right direction, if it had not been confined to the part it was. But it failed in the most important part. He made no preparation for keeping the wound open until a new deposit of tissue took place. Not only have improvements in the incisions been made, but the extensive removal of tissue and deep sutures have been done away with,

The object of the operation, both in entropion and distichiasis, is to remove the foreign bodies (cilia), from the cornea, and allow healing. The stitching of the cartilage in any part does not attain this more effectually than simple, short sutures in the skin over the lids. It is not a permanent change in the skin covering the lid, that we need, but a permanent change in the cartilage at its outer edge. It matters not how much cicatrization or irregularity of surface in the cartilage from cupping, etc., if you have the outer edge in proper and permanent position and shape, you have obtained all that is required.

I will now describe briefly, the operation necessary. There is scarcely ever much change in the cartilage of the lower lid, and therefore no necessity for incising the cartilage in it.

The lid should be everted and held firmly in place, and with the aid of a strong lid knife, enter the cartilage near the inner or outer side, about three-fourths to one line from its outer border, passing parallel to the edge of the lid, completely across the cartilage, only cutting through the same without implicating any soft structure, save the conjunctival membrane. Having finished this the lid is allowed to return to its natural position. Then the knife is passed along the edge of the lid, on the outside, derectly opposite the inner incision, or nearly so, about a line from the insertion of the cilia, and parallel to the edge of the lid, only passing through the skin. All that now remains to be done, is to pass sutures of fine silk through the edge of the lid, near the insertion of the cilia, and into the upper edge of the incised skin. The number of sutures required is about five or six. It is best to use

quite a number, for it is by their being tied tightly, that we get a temporary separation of the edges of the cartilage incised beneath; this being the object sought for, that the separated cartilage may have a deposit of new tissue between its edges, to fill up the space, and pitch the cartilage forward and allow it to take the shape of the lid as placed in the operation. This it will do in a short time, and before the skin resumes its elasticity, and the lid its former place and shape.

It will be necessary once or twice each day after the operation, to evert the lid and tear open the wound, so as to increase the amount of granulation tissue, thereby giving a greater outward curvature of the edge of the lid, and removing all danger of irritation of the cornea from the distorted cilia. I desire to state that this step in the operation, viz: tearing open the conjunctival wound every day, till a sufficient deposit of new tissue has taken place, is one of most important, as we rely mainly on this new deposit, to turn the edge of the lid outward, and the distorted cilia away from the cornea. Only four or five days is necessary to have granulations spring up in the cut surface of the cartilage, and then it no longer needs support from the outside to keep up the new position.

In operations for entropion of the lower lid, and also, in some cases, on the upper lid, especially in some cases of distichiasis, when there is no cicatrization of cartilage nor atrophy of the inner edge of the lid, a modified operation will answer, which does not include the cartilage in the incision nor sutures through it. And while in this we remove a small portion of the lid, the object sought for is not a permanent shortening of the skin, but a thickening of the edge of the lid by granulation and deposit of new tissue. I will here remark that this operation is applicable to only a limited number of cases, and these must be well selected. This operation is made by first passing a strong lid knife just beneath the cartilage along the border of the lid, keep close to the surface of the cartilage, and do not pass it deeper than one and one-half lines, extending the incision the entire length of the cartilage. Next, by the use of long-armed curved forceps, grasp the skin close to the insertion of the cilia, on the outside, about one line from the insertion of the same. Then with the scissors clip out a portion of the lid all the way across, one to one and one-half lines in width. The depth should barely exceed that of the true skin. The sutures should be passed in the free border of the lid, between the cilia and the incision, and thence to the upper border of the incision and through the skin

only. The sutures should be close together, using about six in closing the wound. This number of sutures will tilt the outer edge of the lid away from the cartilage, and will hold apart the cut edges in the border of the lids, when so placed. We then have granulations and new tissues deposited in this space between the outer border of the lid and the cartilage. The advantage of the first operation, however, is in the more permanent character of the new deposit, in the cartilage being cartilaginous. I would therefore generally recommend the operation with incision in the cartilage and through the conjunctiva. The limited amount of structure involved, and its simplicity, would not at first recommend this operation, but once tried you will no longer entertain a doubt of its effectiveness and its superiority over any operation formerly taught in our text-books, all of which, in my hands, has been ineffectual, unsightly and many times threatened my patients with destructive sloughing from the extensive incisions and detachment of tissue from its source of nourishment. In this simple operation, you have nothing more to fear from this source than from a simple incision through the lid. The after-treatment is simple; most cases being able to attend the office from the day following the operation, there being but little pain or other inflammatory symptoms, compared with other operations. The sutures need not be removed for three or four days, if so desired.

JEQUIRITY.

BY R. H. CHILTON, M. D., DALLAS, TEX.

[Verbally reported and written by request of the Texas State Medical Association at its meeting in Belton, Texas.]

THE recent introduction of this remedy into opthalmic practice, and the wonderful results claimed for it in the treatment of trachoma and other affections of the eye, demands more than usual attention.

De Wecker, of Paris, first called the attention of the profession to its use, in 1882, and claimed that he had seen more than ordinary good results from its use. Prof. Gruening, of New York, gave the first published statement of its practical use in America, in Feb., 1883, in three cases of trachomatous pannus. I began the use of jequirity, or Indian licorice bean, in Sept., 1883, and the results obtained from its use in the cases in which I have used it, are such as to encourage its use in a more systematic way, by which I hope to be enabled to decide as to what character of cases it ought to be limited, if we expect anything like permanent success. At present, pannus, be it from chronic conjunctivitis, or trachoma, seems to be the only character of cases in which it is positively beneficial. It is certain that it is not indicated in all forms of trachoma with its complications, nor is it applicable, do I think, from what I have learned and seen of its use, except in those cases that have resisted the ordinary means, and in which the usual mucous and muco-purulent discharge had ceased. Possibly a mild solution, long continued, as a collyria, may play an important part in the treatment of eye affections hereafter.

The solution used by me in the first four cases, was made by macerating in cold water instead of warm, and the strength was after the first published formula of its use by De Wecker, viz: Eight beans to four ounces of cold water for twenty-four hours; then add four ounces of

hot water and filter after cooling. The strength of this solution was about one-half per cent.

CASE I.—W. C., aged 35 years, had trachoma, pannus and corneal ulceration; vision, at beginning of treatment with ordinary remedies, was 2-200. After several weeks of the old treatment, was improved, but not well. The corneal ulcers healed, leaving pannus and trachoma. There was much thickening of the conjunctiva and eversion of the lids. Commenced the use of the jequirity infusion on September 20th, 1883; S. 20-200. The infusion was penciled on the everted lids twice per day, and a compress wet in same solution kept to the eyes. Gave no result till after three days use; slight lachrymation and mucous discharge then appeared; no croupous membrane yet; pain slight at night; remedy continued for five days, with no increase of symptoms or croupous deposit. Ten daays after treatment ceased the vision had improved decidedly; S. 20-40. Patient could read large print. Granulations had subsided markedly, so much so, that the patient asked to be discharged.

CASE II.—W. H. H., granular conjunctivitis of four months standing; cornea clear, and vision only affected by the existing photophobia.

The usual application was made of a one-half per cent. solution; remedy produced but little of the jequirity inflammation; only slight increase in the amount of mucous discharge. The applications were continued for several days, without any apparent result.

CASE III.—J. B., aged 24 years, white, had trachoma with thickening of both ocular and palpebral conjunctiva. The jequirity infusion was applied every four hours to the everted lids, with a compress of same solution kept to the lids. First day, no result; second and third day, slight amount of catarrhal inflammation; no croupous membrane. Result, negative.

CASE IV.—B. F., aged 40 years, white; same disease and results as in the above case. Thinking that I might have been using beans that were inert from age, I procured from Parke, Davis & Co., Detroit, Mich., a quantity of fresh beans. I also decided to increase the strength of the infusion, though at that time I had not even the sanction of the author of this treatment, or any one else, for so doing. I then had prepared a 5 per cent. solution of the infusion with cold instead of hot water, as directed in the original formula. And I will here say I regard the infusion made with hot water much less active than that with cold water. The one-half per cent. solution was thoroughly tried on all the

cases to which it was applied, since which time, with a stronger infusion of the beans, I have never failed to get the specific effects in a few hours.

CASE V.—D. L., male, aged 33 years; granular conjunctivitis. This case had the most extensive granulations that I have ever seen. The enlarged papilla being profuse and prominent, and at least one to one and a half lines in length. The surface presenting the appearance of raw flesh. The secretion was scant; hardly appreciable. The cornea had each an extensive ulcer, partially healed, but surrounding each ulcer a sufficient amount of opacity to produce blindness, the patient being led to the office by his father. His general condition was bad, having been confined in a dark room for a long time. The infusion was applied in the 5 per cent. strength, to the everted lids, three times a day, and compresses wet with a 2 per cent. solution were kept on the closed lids. I will state here that a fresh preparation of the infusion was made for each separate case. The following morning the patient reported that he was unable to sleep during the night, and had suffered intense pain in the eyes, head and nasal passages. Examination revealed abundant lachrymation; muco-purulent discharge very free, and photophobia intense. The ocular conjunctiva was chemosed to an extreme degree. The lids were swollen, red and very difficult to evert. The palpebral conjunctiva was covered with a grayish-white copious deposit, and there was also a copious discharge from the nasal passage. No further treatment was given, for the present, than warm water dressings. The effects of the jequirity did not subside for three or four days, after which, examination showed that the granulations had, as it were, simply melted away, leaving the lid of the left eye entirely smooth. The right eye had some few granulations left, besides a thickened condition of the conjunctiva of the upper lid. The cornea in both eyes had cleared surprisingly. Patient was enabled to walk several blocks to the office alone. Vision was improved in proportion to the improvement in the lids. Two weeks later I applied the same solution again to the right eye, with same results as to its action, and with a complete cure. Case was discharged without further treatment for granulations. In this case not only did the catarrhal inflammation affect the conjunctiva, but extended to the Schneiderian membranes, viz.: the nasal and pharyngeal, has occurred in at least three or more of my cases; though I have failed to produce specific effects on the tonsils and soft palate by its use in this locality, although used in one case for eight days.

CASE VI.—W. S. M., white, male, aged 26 years. Trachoma of

three months standing. Cornea clear. The granulations here are of a mixed variety. A cantholysis preceded the jequirity treatment for some weeks. A 5 per cent. solution of the infusion was used as in the last case, on the everted lids, and a weaker solution used with compresses to the closed lids The peculiar effects of the infusion appearad after five applications. Lachrymation, chemosis of the conjunctiva and croupous deposit were prominent. Pain severe and so persistent that the patient insisted on having an anodyne. The inflammation did not subside for three or four days, having the same characteristics as the last case. Results negative.

CASE VII.—J. C., white, male, aged 20. Trachoma with pannus of left eye, with the granulations extending to the ocular conjunctiva. The usual 5 per cent. infusion was used with compresses wet in a 1 per cent. solution applied to the closed lids. Five applications were made. The characteristic symptoms came on after the fourth application, though mild in extent. Croupous deposit also present. After one week the eye was examined, but no improvement was noticeable. Two weeks later I re-applied the jequirity infusion in the same manner as at first, and obtained the same inflammatory effects after the fourth application. There being no great amount of chemosis or other severe symptoms, I decided to push the remedy to obtain a more profuse deposit and active inflammation. Remedy was thus kept up for two days with no further increase in the already existing excitement; but when the inflammation subsided I had the pleasure of seeing the patient completely cured.

CASE VIII.—Miss R., aged 18 years. Had suffered from corneal ulceration, the result of trachoma and pannus, besides an opacity of the entire upper half of the cornea. Applied a 5 per cent. solution four times during two days, with compresses of a weaker solution to the lids, Catarrhal symptoms appeared within twenty-four hours after first application; croupous deposit in small amount only. This case took its own course from this on, and the result was indifferent. After the lapse of one week the remedy was re-applied in same way and same strength, with more decided results as to specific effects of the jequirity and with a complete cure of the corneal ulcers, pannus and co-existing trachoma.

CASE IX.—R. J. E., white, male, aged 26 years. Long standing case of chronic conjunctivitis, with opacity of the cornea. No discharge. Used the usual 5 per cent. solution of the jequirity infusion every few

hours during the following twenty-four hours, when examination showed specific effects of the remedy, also croupous deposit. The action of the remedy was not severe though the case was much benefitted both in clearing up the opacities and the cure of the chronic conjunctivitis.

CASES X AND XI.—Granular conjunctivitis. No corneal complications. Remedy applied as in the above cases, with resulting active inflammation and croupous membrane. No result.

CASE XII.—J. S., white, male, aged 30 years. Chronic conjunctivitis, with recurring attacks of a mild form of keratitis; thickening and lustreless appearance of the cornea. Remedy applied as in previous cases, both to the everted lids and by the use of compresses. Only three applications. The specific effects produced in about four hours, followed by a high degree of inflammation; great chemosis of the conjunctiva, photophobia and pain; croupous deposit abundant. Induration of the lids was a prominent feature in this case. The inflammation did not subside for several days; there being a constant mucous discharge. The result was perfect success in clearing the cornea and in relieving the lid trouble.

CASE XIII.—L. D., mulatto, female, aged 40 years, had chronic conjunctivitis with opacities of the cornea from former ulceration, in both eyes. There was a peculiar, ropy and tenacious mucous discharge, looking like the half-cooked white of an egg. There was no thickening of the lids, and no keratitis. The five per cent. solution was applied four times, and was followed shortly by the most intense pain, accompanied by swelling and induration of the lids, together with a copious discharge of mucous and tears. The chemosis of the conjunctiva and the swelling of the lids was so great that a view of the cornea was impossible until this passed away to some extent. When the cornea was first seen, extensive ulceration had taken place, and that, not confined to opacities before present. The severe symptoms lasted for several days, though other remedies were applied to the existing inflammation. The patient passed from under the influence of the remedy slowly, leaving the eyes in a decidedly worse condition as to the original trouble, and a superadded ulceration of the cornea, which came near perforating and destroying the eye. This was the first case, to my knowledge at that time, of such a bad result from the use of the jequirity infusion. The general health of the patient was bad, she having a rheumatic history.

The case afterwards progressed badly under the usual treatment for such troubles, and weeks afterward had a relapse of her cornea ulcera-

tions. Since this case has been treated by me, I see reports of like character from others.

CASES XIV. AND XV.—Both glanular conjunctivitis with pannus, and both were treated with solution as in case No. V. There were only three applications made in each case. The course and result of these was the same as in No.V, save the application was only given one trial.

Since reporting the above I have treated several cases by the use of the jequirity infusion, with varying results; but in one case I had positive harm from its use. All the late published reports, and De Wecker himself, agree that the remedy is not altogether harmless. Regarding the peculiar principle that produces its specific effects, it is claimed to be micrococci. The want of action of a weak solution would tend to oppose such a view, but the use of the solution of the bichloride of mercury as an antidote to the inflammation produced by it, would confirm it. I am not prepared to express an opinion.

All writers agree now that it will increase an existing purulent inflammation, and De Wecker now admits that it is unsafe in all such cases, though in his first report he claimed the cornea to be exempt from harm in its use. Some patients are much more susceptible to the remedy than others, hence the eyes should be examined after each application.

Whether the pus arising from the use of this remedy is inti-inoculable or not, I am unable to say, but would conclude that it was, if freely and carefully applied. The proper selection of cases for its use is the most important of all the subjects connected with the discovery of the jequirity bean. Granular lids with pannus, without pus or muco-purulent discharges; pannus of long standing, with ulceration of the cornea, the latter being of a chronic and indolent character; chronic parenchymatous keratitis and strumous thickening of the cornea; and thickening of the conjunctiva from long standing inflammation, will, if properly selected, derive benefit from its use in a great number of cases. The remedy will very likely displace blenorrheal inoculation, being much safer and more easily controlled. We conclude from its use that the remedy is beneficial only in a limited number of cases, these being well selected and of the class above referred to; that the number cured is comparatively small, and that other treatment is better adapted to a majority of the cases, and will of necessity be used; that the remedy in the hands of careless and inexperienced persons will be harmful, and its effects must be watched and examined several times during the day; that the remedy is by no means a specific for any disease.

FIBROID TUMOR OF MIDDLE EAR.

SEVERE NEURALGIC PAINS—OTORRHŒA AND DEAFNESS OF FIVE YEARS' DURATION—REMOVAL OF TUMOR—RECOVERY.

BY C. W. TRUEHEART, M. D., GALVESTON, TEXAS.

LAURA Q., aged 15 years, native of Texas, came under my care June 16, 1883.

HISTORY OF CASE.—For over five years has, with occasional intermissions, been subject to deep seated pain, very distressing ringing, etc., in left ear, with deafness and slight discharge. At times the pain which seemed neuralgic in character, has been very severe and sometimes extending to that side of the head and face. Treatment, both local and constitutional and change of climate, has been tried but with only temporary amelioration.

PRESENT CONDITION.—General health fairly good; has already acquired the faculty of articulation; listless manner and vacant expression of countenance induced by long-continued deafness in the young. Left ear: hears the watch only when pressed firmly against the ear; ordinary voice at two feet; tuning fork vertically placed on the apex of the head is heard with only slightly more distinctness on the left than on the right side; Eustachian tube completely closed; membrana tympani is of a dusky red, somewhat thickened and irregularly sunken; a little posteriorly to the handle of the malleus is a small perforation the size of a large pin head, with pus oozing from it.

Right ear: Watch heard at two inches; voice at six feet, when attention has been previously fixed; membrana tympani rather depressed; light spot indistinct; examination with the microscope reveals post-nasal catarrh with granulated condition of mucous membrane.

Concluding the case to be only an ordinary catarrhal inflammation of the middle ear, Eustachian tubes, etc., the child was put upon cod liver oil, iron and lime, good diet, etc., and the usual local treatment for such cases. But although systematically used four or five weeks it was without appreciable benefit to the left ear, except the opening of the Eustachian tubes by means of the catheter. The right ear was improved decidly and in every respect.

A more thorough inspection of the left ear was now made, by illuminating the ear by means of a cone of sunlight thrown into the room with a mirror, a slight and uniform bulging of the postero-inferior part of the membrana tympani was observed, and the presence of a pale red, smooth mass was discovered in the middle ear; seen and felt through the perforation in the membrane.

I at once determined to enlarge the opening. This was effected, little by little, in several sittings, by means of the knife, assisted by fuming nitric acid applied in minute quantities through a small capillary glass tube, to the edges of the opening. A few days thereafter, when the inflammation and sensitiveness had subsided, the parts being cleansed by a gentle stream of water, applied as hot as could be borne, there was plainly visible through the enlarged opening, a fibroid tumor, of cartilaginous hardness and toughness, attached by a broad unconstricted base, to the inner wall and filling out the postero-inferior half of the tympanic cavity, and pushing the membrane outwards.

On the 30th of July, Dr. Jno. M. Haden administering chloroform, the patient lying on a table, the ear illuminated by the cone of sunlight reflected into the ear from a forehead mirror, I succeeded, with much difficulty, in getting the loop of the snare close up around the base of the tumor. When about half or two-thirds cut through, so great was the resistance of the fibro-cartilaginous mass, that the snare wire (made of the best annealed steel) broke, leaving the fibroid still attached. The reapplication of the snare loop at this sitting was not practicable, on account of the hemorrhage, &c. Two days thereafter, however, I succeeded in seizing the tumor with a toothed forceps, and completing its removal by twisting it off. Two days later, after first drying the parts thoroughly with absorbent dental paper, I carefully cauterized the stump of the tumor with fuming nitric acid, using a solution of soda to neutralize any excess of acid present. This cauterization was repeated every second to fifth day, as the child could bear it, for weeks; and thus the last vestige of the fibroid was gotten rid of. Unfortunately,

but unavoidably, in destroying the fibroid fully half of the membrana tympani had to be sacrificed.

With a view to trying to bring about at least the partial restoration of the lost membrane, I resorted systematically to the plan of cauterization of the edges of the opening with the mitigated lunar caustic, fused upon the tip of a fine silver probe. In the meantime the treatment of the other features of the case, except the use of the catheter on the left ear, were receiving due attention. Much to my surprise and pleasure the openings, under the cauterizations, used with sufficient frequency to prevent cicatrization of the edges, steadily closed in, and finally healed over, thus restoring the membrana tympani.

On the 5th of October, same year, Laura was sent back to her home in the interior, greatly improved in general health, hearing, expression of countenance and articulation. The watch, formerly heard at two inches on the right side, is now heard at fourteen inches. On the left side, where it was only heard when firmly pressed against the auricle, *it is now heard at eighteen inches.* All the tinnitus aurium is gone, and hearing for the voice is quite normal.

The lessons which this case, as I conceive, tends to inculcate, are: 1. Do not follow up an unsuccessful routine treatment of a case without reviewing, and it may be correct to modify your diagnosis. 2. Do not hesitate to enlarge a perforation in the membrane of the drum, when required for more thorough exploration and treatment of the cavity of the middle ear. 3. After having cured the deeper-seated diseases of the ear, but not until then, try cauterizations of the edges of the opening in the membrane, to stimulate it, if possible to healing over.

SOME UNCOMMON CASES IN MY PRACTICE.

BY M. SALM, M. D., AUSTIN, TEXAS.

DURING the last six years of my practice I have met with many strange cases which, up to date, I have not been able to explain to myself, satisfactorily. I have a record, among the cases, of cataract, several of which I wish to mention. All of them, curiously to say, ended in death. Each of these cataracta seemed very slow to ripen; they seemed to be of a gray green color, the margin of the lenses remaining semi-transparent, which allowed the patient to see some objects distinctly, upon instillation of a two grain solution of atropia. In each of the patients the growth of cataract seemed to be at a stand. still for about one year before death. I have endeavored, with all means at my command, to get a view of the fundus, in each case; but, on account of the opacity, could not succeed. How will you explain this? Was the cataract the forerunner of death? No!

January, '83, a little patient, girl of 5 years; upon examination found what I took to be incrustations of upper and lower lids, resulting from blepharitis, or other inflammatory disease; directed how the patient should be attended to, in order to remove them, and return with her again in the evening. P. M.—Patient presented the same appearance as at morning, in spite of applications to soften incrustations; I proceeded, then, with the help of small forceps, to remove them. The tenacity with which they stuck to the margin and lashes astonished me, and my astonishment knew no bounds when these apparent incrustations, with a few lashes, took legs and deliberately walked off. Upon closer examination, with the glass, found them to be a species of lice, young and old, of the flat kind; not being very well versed with this kind of louse-ology, I am not able to give you the technical name for this tribe. At any rate, after having removed as many as possible,

without producing pain, I sent her home, directing the use of 2 gr. hydr. præc. flav. to ʒij of cosmoline, to be applied to lids, commencing that night, by being thoroughly rubbed in. Next morning I found that the little fellows had lost a great deal of their grip, and were easy to remove, and in another sitting removed all of them. It suggested itself to my mind to look for them on the little girl's head, but no trace could I find, or have found, of any of the tribe there. Why should they just have settled on the margin of the lids, almost burying half of themselves out of sight? and why not seek another place? Coincidence, some will say; but I have still another case on record:

CASE II.—Miss A. B., a buxom, healthy-looking German girl, complained of sore eyes; upon examination with glass, "having been made wary in the first case," and not trusting to appearances, found in the left eyelids, upper and lower, another herd of the little pests, clinging on for dear life, and could only be removed with forceps; treatment as is the above case, and succeeded in getting rid of them in three sittings. Directed my inquiries as to the probabilities of their being present in other places studded by hair, but was assured promptly in the negative. Probably coincidence again; why did they squat just on the young lady's eyelids? why not on both, and why not on some other parts of the body? Some will say uncleanliness may have been the cause of bringing them on; but an eyelid is certainly not the filthiest portion of a filthy body. I have not been able to explain to myself their appearance, and would be glad to be informed upon the subject.

A CURIOUS PUPIL.—Mrs. L., age 27, from Houston, presented herself to me June 27, '83, to have her eyes examined. The lady is of German parentage, and in good health; complained of neuralgia; frequently decided hemicrania of a severity which compelled her to seek her couch each time, and very frequently at that; the eye, upon examination, presented a truly remarkable appearance, causing me to inquire if she ever had any injury to the head, which was answered in the negative. The pupil, what was left of it, or rather the iris, what was left of *it*, presented a complete and huge figure of eight, as this sketch shows. (Sketch omitted.)

This, as you will see, is not a normal condition. Upon ophthalmoscopic examination found the vitrious rather cloudy, containing a mass of stringy formations, as a result of severe choroiditis, this disease having given rise to the abnormal condition of pupil and severe neuralgic pain. V.–O. Tension soft. Those bodies in the vtriious may dimin-

ish somewhat after treatment, but the eye will never be of any use to the patient, as the ravages produced by disease are incurable.

Have you ever thought what, and how much mischief is produced by poultices, poultices to the eye; how many eyes are yearly ruined by these applications ot moisture and warmth? Do you ever get a severe case of conjunctival or corneal inflammation where poultices in one shape or another had not been used?

I do not doubt that warmth and moisture relieve pain to a great extent in local inflammation, but we also know, beyond a doubt, that it promotes softening of abcesses, and that it favors migration of leucocytes. Nor will I desire certain beneficent results in certain few cases of corneal trouble, in eyelites, and after an eye has been destroyed.

When I speak of poultices I mean not to discriminate among them in favor of one or the other beginning with the bread and milk poultice and finishing with the fresh cow-dung poultice; including all such as raw beef, flax seed, potato, alum, rotten apples, curd, etc.

The principal danger is from corneal applications produced by this too long continued use of warmth and moisture, terminating also in panophthalmites or iritic adhesions. Under influence of moisture and warmth the vascular system of the conjunctiva is increased, enlargement of papillæ and cell proliferations are favored and simple ante conjunctivities will be converted into a chronic catarrhal, more difficult to treat than trachoma, resulting at last in true granulations.

Therefore we see in poltices not an unimportant factor of granulated lids when we cannot account for them in any other way.

I have now under treatment a young man 19 years of age who came to me about seven months ago, totally blind. I'll give you his history as told by himself: "When I was first taken I had cold and my eyes began hurting me. I was advised to use some Templeton's eyewater, but my eyes were worse next day. Then an old lady came in next and advised me to use cow-dung poultice; it was tried and my eyes were worse than ever. Old women came in and not two of them offered the same remedies. By this time I was blind, and I believe, from all information I can get, about six different kinds of poultices must have been used on my eyes and I am certain another one would have put my eyes out altogether." Cornea of right eye totally straightened, of left partly, so that the young man, even after successful iridectomy has been made will never have more vision than to go about. This is only

one of the cases in which to all probability ruination of eyes may be attributed to direct action of poultices. I have of late years confined myself to *cold* icy compresses or to hot compresses, never applied more than one-half or one hour at a time, according to the case, leaving the selection of hot or cold to the patient, as it may feel most agreeable to him.

To wind up my report for this time I have annexed seven biographical plates giving you a thorough insight regarding which diseases and causes produce most blindness. These deductions found therein may be nothing new to my brother specialists here assembled, but I am certain they will find some points of interest; and I am also certain that they are classified in such a manner as seem to be of more than passing interest to our general practitioner. I have undergone great labor to produce them, and I have been able to make them as interesting and compresensible as desired.

[NOTE.—Owing to the miserable manuscript and the utter want of care and attention in the preparation of Dr. Salm's article, the publishing committee could not make any sense or connection to several pages, and the greater part, therefore, of his contribution has been necessarily omitted, together with all plates; the latter for want of facilities.

F. E. D., for Pub. Com.]

SECTION ON OBSTETRICS.

APPLICATION OF OBSTETRICAL FORCEPS TO THE HEAD IN BREECH LABORS, WITH CASE.

BY W. A. ARCHER, M. D., HOUSTON, TEXAS.

IN presenting the following case and observations upon the subject embraced in the above caption, it is not claimed that anything new is adduced, but attention is directed to an old thing that appears to me to have been neglected, to the disastrous extent of costing the lives of many children, to say nothing of other bad results which have followed. Every obstetrician and general practitioner occasionally meets with a case of labor in which the delivery is accomplished by the breech. Some of these are prolonged, some are preternatural, and some are originally cephalic presentations, but being turned, are delivered by the feet or breech. It is in any of these that the forceps may be required to be used. But the present observations are intended to be applied more especially to those that come under the class of natural presentations, and if natural, normal. All natural labors are either cephalic or pelvic presentations. Some authors make the relative proportion between them as fifty is to one. Some make the proportion greater, some less. In my experience it has been very much less. All agree that there is very much more risk to the child, in a pelvic presentation, than in a cephalic. Some say that one of every seven children thus born is lost, and they are they that regard it as least dangerous, while others place the mortality as high as one in three. If then, this is a natural presentation, is not this an extraordinary mortality for a natural process? Is there any preventive of such fatality among children born that way? I believe that a judicious and *timely*

u e of the forceps, will be a preventive in a large proportion of what would otherwise be fatal cases, but when I undertake to find authority for this opinion, I find that this subject is dismissed by most of the obstetrical authors with little more than a passing allusion. Playfair discourages the use of the forceps, and advises several expedients, making the forceps a *dernier ressort,* and dismisses the subject with about eight lines. Byford scarcely alludes to them as a resource at all. Hodge alludes to them several times in different connections, in a vague, indefinite sort of way, but nowhere, that I've been able to find, gives definite directions about the method of their application. Meigs, the old, antiquated writer, who has been displaced from the schools as "too fogyish," is plain and explicit about the necessity for them, and the way to apply them.

I would like to quote his words, but to do so is incompatible with the intended limits of this paper, and I can only wish that each practitioner shall refer to him and closely read his clear and lucid instructions on the subject, as well as his remarks on the necessity of being prepared to put them into practical execution at a moment's notice. As for me, I always carry along my obstetrical forceps when I am called to a case of labor. I was confirmed in the habit of carrying them with me by the following case:

March 28th, 1883, was called after dark to go and attend Mrs. R. in her second labor, having been previously engaged. She lived some distance from my house, and the night was dark and the way muddy. So I prepared myself with what I thought I might need, rather than to send back and forth. Among other things, I carried chloroform and forceps. She was suffering with what appeared to be a dilating pain of the first stage of labor when I entered the room, and it not a very severe one, so that I did not perceive any necessity for haste, and leisurely removed my overcoat and proceeded to warm my hands before approaching the bedside, calling for some warm water at the same time. While waiting for the water she had another "pain," and in the midst of it, I heard the rupture of the amniotic sac and the rush of the "waters." Hastily went to the bed, without waiting for the warm water, and found that the child was being born by the breech. This contraction of the uterus continued without cessation until the body of the child was expelled, when it ceased completely. I drew down the umbilical cord, and rapidly brought down first one and then the other arm and shoulder, and exhorted her to "bear down" and force the

head out. She was a sensible woman, and anxious to have her child saved, and obeyed the best she could. I resorted to all the expedients I knew of, without the slightest effect, until I began to think the baby would certainly be dead when born; so I said to her, "Your baby will be dead unless I can immediately deliver you." "Anything, Doctor, but that," said she. "Then lie perfectly still, and I will save it with the forceps," I answered. I introduced the forceps as rapidly as possible, without the use of chloroform, from lack of time, the body of the child being turned over so that its back was almost in contact with the mother's abdomen, and proceeded to extract the child, bringing the chin along the floor of the pelvic outlet and the posterior wall of the vagina, as nearly in the line of Carus' curve as possible.

The delivery was extremely easy and very rapid, aided thus by the forceps, but the child was apparently asphyxiated, the pulsation in the cord having ceased from the compression, and it not having breathed. I immediately began artificial respiration, and immersed it in hot water, as hot as I thought its skin could bear without injury, and after a few minutes of assiduous work, had the satisfaction of seeing it gasp, and soon gave it to its delighted mother, "all right."

I am satisfied that a very little longer delay would have been fatal to the child, and it would have been another still born child to have helped the keeping up of the terrible average of Dr. Churchill's estimate of one in three and a fifth. If calling the attention of these busy practitioners to this matter, and relating this case, shall result in the saving of one "poor innocent" in the future, I shall be amply repaid for trying to direct some attention to this matter.

THE LYING-IN CHAMBER.

BY J. D. BASS, M. D., PITTSBURG, TEXAS.

OUR presence in the lying-in room is not as an idle spectator; but with an investigating mind we are to enquire as to the true condition of our patient. Having done so, it is very essential to know that we are possessed of all the professional skill necessary to the safety of the parturient while passing through this trying ordeal of child-birth.

To stand at the bedside of a woman, while in agony, is to feel the great responsibility resting upon us as obstetricians. To administer to her ills, and know how to alleviate her sufferings, is the great province of our profession. To be well acquainted with the mechanism of labor is to know how the vital forces are acting, in perfect harmony with certain laws, carried on to a geometric certainty. "A perfect acquaintance with all its details is the real foundation of scientific midwifery." To fully understand this mechanism is to be the better qualified to diminish the anxieties, to alleviate the sufferings, as well as to ward off the dangers, that are sometimes met with in this lying-in chamber The more proficient we are, the better qualified to augment the chances in favor of the infant. Hence, there is no subject more worthy of profound study than the science of obstetrics. To be ignorant in this branch of the profession is to feel that we are not master of the situation in the hour of danger, and hardly at par with the uneducated midwife.

It is not my purpose, at this time, to enter into detail the duties of the accoucheur in the *first* and *second* stages of labor, or child-birth, but to pass to the *third* and last stage—that of placental delivery. When and how shall this be accomplished, without detriment to the accouchee? There are three principal modes by which this desired effect is brought about—expression, extraction, and the *vis a tergo* of nature. Authors differ materially on this point. Dr. Playfair, following

the teachings of McClintock, says that "no attempt should be made at the delivery of the placenta till at least twenty minutes after the delivery of the child." There are others that sanction even a longer time than this. Nature very often fails to discharge her duty, from exhaustion, and these delays are dangerous. Extraction is very hazardous, unless followed by vigorous contraction. Therefore, the safest and most rational, attended with less danger, is that method known as "uterine expression," instituted by Crede, of Leipsig. "In Germany this method is now used to the exclusion of almost every other;" and, reasoning from a rational stand-point, it is strange it has not met with universal adoption.

This Credean method is practiced as follows: "The obstetrician, laying his hand flat upon the abdomen of the patient, stimulates the uterus to contract by moving the abdominal wall in a circular manner over the uterus. The friction, gentle at first, is increased until the uterus contracts. At the height of the uterine contraction the upper segment of the uterus is firmly grasped with the hand, the fingers over the posterior and the thumb over the anterior surface. The placenta is thus expressed from the uterus, only enough downward pressure being used in the *axis* of the uterus to maintain a firm grasp."

This compression is continued with every uterine pain, till successful; the child born, infant circulation established, cord ligated, placenta delivered. An experience of nearly thirty years in practice has taught me that this Credean method more closely imitates the natural process of placental delivery than any other method of art. Why?

1st. Because it maintains firmer retraction of the uterus till the afterbirth is expelled.

2d. Because it keeps the uterine vessels ligated, as it were, and prevents post-partem hemorrhage, as well as prevents the formation of coagula in the deep uterine sinuses.

3d. Because this plan, more than any other, favors permanent uterine retraction after the delivery of the placenta.

In conclusion, I submit the following summary:

1st. That the placenta should be expelled as soon as the infantile circulation is established and the cord ligated.

2d. That after placental expulsion this external support to the fundus should continue until uterine *retraction* is complete.

A REPORT OF A CASE OF LABOR IN A GIRL AGED ELEVEN YEARS AND NINE MONTHS.

BY T. H. STALLCUP, M. D.

I WAS called February 2, 1882, to see Jennie M., who, I was informed, had been in labor about thirty-six hours, in the hands of a midwife. I hastened to the house of her father, who was known to me while an old slave, with some Indian blood, claiming to be a half-breed. Upon entering the house, and being astonished at the very youthful appearance of my patient, began inquiring of her father about her age, who informed me she had not arrived at her twelfth birth day. The next proceeding was to make a digital examination which not only revealed the fact that she was pregnant but a well-formed occiput was plainly to be felt, descending the inferior strait, which was delivered three hours afterwards without the aid of instruments. Child a girl, weighing a fraction less than seven pounds, with bruise on side of head and face, was asphixiated at birth, but was partially restored by the usual methods of blowing breath in the mouth and tepid bath, etc. After this I made some inquiries as to the possible cause of the injury found upon the side of the face and head, and was informed that the day before labor set in, she slipped off a gallery frozen over, striking her side against the ends of the planks. I then left, to return later in the afternoon, finding the baby dead and the mother resting quietly.

My object in reporting this case is to call the attention of the profession to the extreme youthfulness of the mother, and the injury to the brain in utero.

REPORT OF COMMITTEE ON THE MINERAL WATERS OF TEXAS.

BY J. M. WILLIS, M. D., CHAIRMAN.

Mr. President and Gentlemen of Texas State Medical Association:

YOUR special committee appointed at the last meeting of this Association, on the subject matter of mineral waters of this State, beg leave to submit the following report:

We have endeavored, as far as time and opportunity would allow, to collect all the material facts pertaining to this subject, a subject of great moment to the people of our State, one in which the afflicted are, and should be, deeply interested—an enterprise of great moment to the people of Texas, because of its financial importance, one in which every physician should take a deep interest.

This, gentlemen, is, comparatively speaking, a new and almost unexplored field with us. As to just how mineral waters are formed, is a subject of conjecture and speculation. In many instances, they are doubtless original, or the water, percolating through the earth, may find soluble salts of various kinds, and take them up in quantity and form mineral waters. Some contain one class of minerals, and some another. Most water is more or less impregnated with some of the mineral salts, but to constitute medicinal water in fact, it must not only contain minerals, but they must be medicinal in character. To define the line just where mineral waters become medicinal, or not, is said by some writers to be difficult and arbitrary. It is said by many that all water containing minerals in less quantity than 50 gr. to the gallon cannot be regarded medicinal in character.

It is doubtless true, that all mineral waters are not medicinal; the distinctive difference is, as before stated, they must be medicinal in

character. It is not our purpose to stop here and discuss the question, as to how mineral waters are formed; that minerals, and gases, are introduced into water, and in quantities sufficient to make them medicinal, no one informed on this subject can deny; also, thermal waters, of value in the treatment of disease, are formed deep down in the great laboratory of mother earth. As to the principal constituents of mineral waters as a bases, they are understood to be soda, lime, magnesia, manganese and iron, combined with acids, as hydrochloric, sulphuric, carbonic and hydro-sulphuric acid.

It may not be amiss, here, to look into the extent and magnitude of mineral and thermal waters, in other ages and other countries, as well as in our day and generation. We find that, even as far back as the twelfth century, mineral and thermal waters were highly recommended for the treatment of many of the diseases known in that age of the world's history. The Greeks and Romans recognized the value of mineral and thermal waters, and they were much sought after in their provinces. The Romans not only valued and used those in their own territory, but discovered and preserved many others in countries which they held by right of conquest, as for example, the hot springs of Bath, England.

Coming on down to a few centuries ago, witness, if you please, the rapid strides that have been made in the old countries on the subject matter of mineral waters.

France alone with her 900 improved Mineral Springs. The 2,500 in Germany, Austria and Switzerland. The 1,200 in Spain. The 300 in Italy, and over 100 in England. The large majority, if not all of which, have been analyzed and classified.

As to the mineral and thermal waters of our own country, they are numerous, and in point of medicinal properties, they hold a high rank where known.

Many of these watering places were long known to the Aborigines of this country as healing waters. It has been but little over a century since these waters have been used by the white people of this country.

It is estimated that in the United States and Territories there are about 1,000 improved Mineral Springs and Wells, many of which have long since been resorted to by the afflicted and pleasure seekers of this country. The Mineral waters in many of the older States are pretty well known, and appreciated because they are known. They have had and are receiving the sanction and support of the best medical talent of the country.

The Mineral waters of Texas are likely more abundant than in any State in the Union; and, as far as known, are second to none now on record, yet they are not appreciated as they should be because so little known. The geologist and scientist are revealing the value of our mineral and coal fields. Our people are now pushing every material interest to their uttermost capacity; nothing is left undone that human ingenuity and money can do.

Now, gentlemen, of the Medical profession, it is left for us to take hold of this almost unexplored field, more important and inviting to us than the waving fields of golden grain is to the agriculturist, and more valuable to suffering humanity than mines of silver and precious stones.

Lord Bacon has said that every man is debtor to his profession; that he should be able to visit and strengthen the roots and foundations of the science itself, thereby not only gracing it in reputation and dignity, but also amplifying it in profession and substance.

The roots and foundations of Medical *Science* have their bases in the primary laws of *nature;* her secrets must be carefully explored, closely scrutinized and patiently *investigated.*

It is said by Dr. Chansellor, of the University of Virginia, in his learned discourse delivered before the Virginia State Medical Association on the 4th of September last, "In the study of the subject of Mineral Waters as a therapeutic agent, we have much to do with the the primary laws of nature. This offers a most fruitful field for our investigation, and its faithful study involves much patience and labor."

He also calls our attention to some of the literature of our country on this important subject.

Dr. J. J. Moorman, of Virginia, the pioneer in mineral water literature in America, the writings of Drs. Bell, Burk, Dungleson, Mutter, Duggan and others. A report of the Ohio State Medical Association some ten years ago, Dr. Walton of Cincinnati, Chairman. Also two reports made through committees, by the American Medical Association in 1879 and 1880.

He says further, that it is gratifying to know that the medical profession of America is directing its attention more and more to the therapeutic value of mineral waters.

The incredulity entertained at one time by a respectable minority of the medical profession, as to their potency as remedial agents, is fast yielding to a better knowledge of their therapeutic application, and the rapidly accumulating testimony in their favor. The increasing

popularity of mineral waters *demands* that science should be brought to study and explain the real interpretation of the advantages claimed for them. In our country fresh examples are annually coming to our knowledge of these valuable medicinal agents.

Dr. Walton very properly states that the knowledge of the action of mineral waters is not so far advanced that they can be reliably grouped according to their therapeutic action. This applies to American waters. However, in the second edition of the above work, he has given a very rational and satisfactory classification, embracing both the chemical and therapeutic systems, under seven heads or divisions, viz: 1st. Alkaline water. 2d. Saline water. 3d. Sulphur water. 4th. Chalybeate water. 5th. Purgative water. 6th. Calcic water. 7th. Thermal water.

In the report of the Commission on Mineral Waters, Transactions of the American Medical Association of 1880, we also find a well arranged classification.

It is eminently proper that all mineral waters be classified, and have proper restrictions placed on their use by intelligent resident physicians. The lack of this is oftimes damaging, both to the water and patient. It requires experience and observation in their use, to determine their application in individual cases.

Let it be remembered that Mineral waters are never indifferent remedies, and either do good or ill to the patient using them.

Hence the importance of a thorough knowledge of the waters used, and how directed, etc.

We will now call your special attention to the accompanying documents (reports) from many of the prominent watering places in our State. Up to this time we have no report from Thorps Springs, nor Lampasas Springs. Lampasas Springs, however, is pretty well known in our State as a health and pleasure resort of no mean pretensions.

Fisher, Lipscomb and Kendrick wells, in Robertson county, this State, like the famous Wootan Wells, are rich in curative elements.

The following is a collated list of watering places in our State known at this time:

Sour Lake, Harden County; Wootan Wells, Lipscomb Wells, Kendrick Wells, Fisher's Wells, Robertson County; Burdett's Wells, near Luling; McQueen's Wells, near Bryan; Mineral Wells, Palo Pinto County; Weaver Wells, Pate's Wells, Sulphur Springs; Lampasas Springs, Lampasas; Thorp Springs, Hood County; Hugh's Springs, Cass County; Dalby Springs, Bowie County.

No report from the Mineral Mound in Southern Texas, said to be immensely rich in medicinal properties, the mud or dirt of which is now being shipped North from which mineral waters of great value are manufactured.

All of which is respectfully submitted,

J. M. WILLIS, Chairman Com.

SOUR LAKE, TEX., April 9, 1884.

J. M. Willis, Chairman of Committee on Mineral Waters:

DEAR SIR:—In compliance with your request, I herewith enclose qualitative analysis of the several mineral waters of this place, made, as you will see, by one of the best analytical firms in this country or any other, viz: Regis, Chauvenet & Bro., of St. Louis. As chemists well understand, the tarry (organic) matter is very difficult of analysis, as is shown by the great number of ingredients resulting from petroleum, of which "Sour Lake tar" is largely composed, in combination with the various minerals found in the waters in which it exists in greater or less proportion.

I wish also to call attention to the fact that the analysis given is not exhaustive in so far as the abundant gases are concerned, viz: Sulphureted hydrogen, carbonic acid gas, and chlorine. These will have to be determined and gathered from the springs and lake. I may here add that some of the gases, inflammable in their nature, are so abundant that they can be easily collected for illuminating purposes, in large enough proportions to light up the place. For further particulars you are respectfully referred to the circular until further developments are made.

In justice to this health resort, I wish to add that I have reasons satisfactory to me to believe that many cases of bronchitis and phthisis pulmonalis would be benefited here; first, by the general improvement of health, and second, by the use of the waters containing the tar, (organic matter). Many physicians of to-day will bear testimony to the utility of petroleum in bronchitis and tubercular consumption. And those of experience in the matter, many of them, at least, acknowledge the deleterious effects of high altitude upon advanced cases of both diseases.

Would be pleased to meet with the State Association, but fear I will not be able to do so this time. Very respectfully,

A. A. ROWLAND, M. D., Resident Physician.

SOUR LAKE.

This remarkable collection of mineral waters known as Sour Lake, is situated in Hardin County, Texas, about eight miles from Sour Lake Station, on the Texas and New Orleans Railway. The Lake is located in a lovely spot, and is surrounded by a grove of stately old oaks which afford a delightful shade, and a cool breeze blows continually from the south. The waters of the lake have a strong acid taste, and close around it are thirteen separate and distinct springs, each one furnishing a different mineral water. The Lake is studded with streaming gas jets which impregnate its waters and a mineral healing tar oozes up out of the ground and floats upon the surface of some of the springs; this is collected and used in the treatment of all kinds of skin diseases, ulcers and scrofulous sores. Both the gas and the tar burn with great brilliancy when ignited.

The Indians discovered this wonderful laboratory of nature and used the waters successfully in the treatment of various diseases, and found out the healing properties of the tar by applying it to sores on the backs of their ponies. Almost from it earliest discovery the property upon which Sour Lake is located has been in legal dispute, which until recently prevented its being thrown open to the public as a health resort.

A new and commodious hotel has been built and furnished throughout. Bath houses have been erected, the springs enclosed, and the surrounding grounds are being improved and beautified. Everything is being done to make the stay of visitors pleasant and to afford them every facility for deriving the full benefits of the mineral waters, mud baths, etc., Comfortable vehicles await the arrival of trains at Sour Lake Station to carry visitors to the springs.

The wonderful freak of nature which has placed so many different kinds of mineral water in such close proximity, is without parallel anywhere, and the curative powers of the waters and baths are unequaled. They are an unfailing remedy for Dyspepsia and indigestion in all its forms; all kinds of Stomach and Bowel disorders, Derangements of the Liver, Nervous troubles and Debility, particularly all kinds of Female Complaints and Weaknesses, Rheumatism, Paralysis, Kidney Diseases, Erysipelas, Scrofula and Blood Poison, all kinds of Skin Diseases, Syphilis and Syphilitic Affections of the Throat, Skin and Bones. The following indorsements are from prominent medical men

and others who have had opportunities of witnessing the wonders of Sour Lake:

I have visited Sour Lake, and believe that its waters are capable of relieving many diseases that defy the physician's art. Fortunately for humanity, the property has fallen into the hands of a gentleman who has made that natural sanitarium attractive alike to seekers of pleasure as well as health. When there last year, it filled to completeness my idea of a delightful summer resort.

AUSTIN, April 3, 1883. R. M. SWEARINGEN, State Health Officer.

"I am thoroughly familiar with the waters of Sour Lake, and have myself experienced their rejuvenating powers. I have visited a number of watering places in the South, among them Hot Springs, Ark.; Bladen and Blunt Springs, Alabama, and Lauderdale Springs, Mississippi, but have nowhere found such a variety of waters as at Sour Lake. They are more rapid in their effects, and possess more restorative and curative powers than any waters I know of. Their action in purifying the blood and expelling blood poisons is unparalleled." H. C. WATTS, M. D.

GALVESTON, May 25, 1883.

"A residence of six months at Sour Lake in the practice of my profession gave me an opportunity of witnessing the speedy relief afforded by the use of the waters in many cases of disease. In all forms of Skin Diseases, Indigestion, Dyspepsia, Chronic Rheumatism, and in fact all diseases save and except that of diseased lungs. I witnessed several remarkable cures of persons suffering from chronic blood diseases of the most loathsome nature. Relief was in each instance speedy and permanent, so far as I was able to find out." THOMAS MCCLANAHAN, M. D.,

GALVESTON, Aug. 4, 1883. And Others.

ANALYSIS OF WELLS.

No. 1.—Grains of solid salts per gallon, 17.69, consisting of the following salts:

Carbonate of Lime, } Quite heavy.
Carbonate of Magnesia, }
Chloride of Iron,
Chloride of Potassium,
Chloride of Sodium (faint).

The water is remarkably free from sulphates, and its residue showed no traces of organic matter. When received it had no odor, and no traces of sulphureted hydrogen or other free gases could be discovered.

No. 2.—Grains of solid matter per gallon, 59.79, consisting of the following salts:

Sulphate of Alumina (strong),
Sulphate of Iron (strong),
Sulphate of Lime (faint),
Sulphate of Magnesia (faint),
Chloride of Iron,
Sesquioxide of Iron (floating),
Organic matter.

The water is clear, without free sulphur or any gases that are perceptible. It has the distinctly acid twang of the soluble sulphates of iron and alumina.

No. 3.—Grains of solid matter per gallon, 67.46, consisting of the following salts:

Sulphate of Alumina (strong),
Sulphate of Iron (strong),
Sulphate of Lime,
Chloride of Iron,
Sesquioxide of Iron (floating)
Free Sulphur (faint).

Has a decidedly acid taste, similar to that of No. 2, is less clear, and shows greater tendency to precipitate free sulphur.

No. 4.—Grains of solid matter per gallon, 22.20, consisting of the following salts:

Sulphate of Lime (strong),
Sulphate of Iron,
Chloride of Iron (faint),
Free Sulphur,
Organic matter.

This water shows quite a free floating bituminous or tarry matter, and has a strong odor of petroleum or naptha, while its residues are sticky with the organic tars and tarry compounds.

No. 5.—Grains of solid matter per gallon, 20.79, consisting of the following salts:

Carbonate of Lime,
Carbonate of Magnesia,
Sulphate of Lime,
Sulphate of Magnesia,
Chloride of Iron (faint),
Silica (in solution),
Chloride of Potassium,
Chloride of Sodium,
Free Sulphur,
Sulphureted Hydrogen Gas (strong),
Organic matter.

This is a strong sulphur water, giving off its sulphureted hydrogen freely, even after transportation, and throwing down free sulphur quite largely.

No. 6.—Grains of solid matter per gallon, 68.44, consisting of the following salt:

Sulphate of Aluminum (strong),
Sulphate of Lime,
Sulphate of Iron (strong),
Sulphate of Magnesia (faint),
Soluble Silica,
Chloride of Iron,
Free Sulphur,
Organic matter.

This water also shows an oily coating, and has an odor of naptha or petroleum, a very peculiar taste and an acid reaction.

No. 7.—Grains of solid matter per gallon, 95.60, consisting of the following salts:

Sulphate of Aluminum (heavy),
Sulphate of Lime, } Faint.
Sulphate of Magnesia, } Faint.
Chloride of Iron,
Sulphate of Iron,
Free Sulphur,
Organic matter.

This is a strong alum water, having a bitter taste, and a strong odor of bitumen from the floating oil which is seen upon the surface, and accounts for the organic matter found in the residue. From this oil is derived the tar found upon drying the condensed salts, and which impregnate the soil about the springs.

No. 8.—Grains of solid matter per gallon, 70.01, consisting of the following salts:

Sulphate of Aluminum (strong),
Sulphate of Iron (strong),
Sulphate of Lime,
Chloride of Iron (faint),
Silica (in solution),
Free Sulphur,
Organic matter.

No free gases; odor of petroleum, but no traces of the floating oil.

No. 9.—Grains of solid salts per gallon, 86.58, consisting of the following salts:

Sulphate of Aluminum (heavy),
Sulphate of Lime,
Sulphate of Magnesia (very faint),
Chloride of Iron,
Chloride of Potassium,
Chloride of Sodium,
Silica (in solution,)
Free Sulphur,
Organic matter.

This is strictly an alum water, giving quick reactions for Alumina. It is remarkably free from carbonic acid, and shows no evidence of sulphureted hydrogen as received. It is the heaviest water of the four, as shown by the above.

No. 10.—Grains of solid matter per gallon, 9.08, consisting of the following salts:

Sulphate of Lime (faint),
Sulphate of Iron (very faint),
Chloride of Iron (very faint),
Organic matter.

This is the freest of all the waters from sulphates, excepting No. 1, and has the least solid matter per gallon of any of the springs. Were it not for its traces of organic and tarry matter, it would be a remarkably pure water for any purpose.

No. 11.—Grains of solid salts per gallon, 17.87, consisting of the following salts:

Sulphate of Iron (quite heavy),
Sulphate of Lime,
Sulphate of Magnesia (faint),
Chloride of Iron,
Chloride of Potassium,
Chloride of Sodium,
Organic matter.

This water much resembles No. 1 in appearance, but has heavier iron and an organic acid not found in the former (No. 1).

None of these waters throw out their iron as the oxide, and none of them have floating impurities at all.

No. 12.—Grains of solid matter per gallon, 71.59, consisting of the following salts:

Sulphate of Alumina (strong),
Sulphate of Iron,
Sulphate of Lime,
Sulphate of Magnesia (faint),
Chloride of Iron,

Chloride of Lime,
Sulphureted Hydrogen (strong),
Free Sulphur,
Organic matter.

This is a sulphur water, with strong odor of sulphureted hydrogen, giving reactions quickly for alumina, and leaving a tarry residue with acid reaction.

No. 13, or the Lake Water.—Grains of solid matter per gallon, 25.08, consisting of the following salts:

Sulphate of Alumina,
Sulphate of Iron (heavy),
Sulphate of Lime,
Sulphate of Magnesia (faint),
Chloride of Iron,
Chloride of Potassium,
Sesquioxide of Iron (floating),
Free Sulphur,
Organic matter.

The lake water is a clear water, with more or less free sulphur, comprising, as is evident, nearly all the salts contained in the various springs.

GENERAL CLASSIFICATION OF SOUR LAKE WATERS.

The waters giving strong reactions for similar salts are grouped together. Since all the waters have some salts in common, it is impossible to separate them into smaller groups; the main features alone will serve as a guide in comparison.

1. Sulphur waters, giving off strong odor of sulphureted hydrogen, throwing down free sulphur plenteously.

Numbers 5 and 12.

2. Alum waters, characterized by their strong acid taste and reaction, and the presence of sulphates of alumina and iron.

Numbers 2, 3, 6, 8, 9 and 12.

3. Iron waters, giving strong reactions for iron, usually as sulphate, sometimes as oxide.

Numbers 2, 3, 6.

4. Carbonates, waters giving reactions for carbonate of lime, magnesia.

Numbers 1 and 5.

5. Magnesia waters, such as give reactions for sulphate of magnesia, usually very faint but decided.

Numbers 1, 2, 5, 6, 9, 11, 12.

The water from Sour Lake may be classed under any or all of these heads, except as regards its freedom from sulphureted hydrogen, which is too faint for detection after transportation.

Respectfully, REGIS CHAUVENET & BRO.,
Analytical Chemists, St. Louis, Mo.

MINERAL WELLS, PALO PINTO COUNTY, TEXAS.

One gallon of water—

Hydrous Sodium Sulphate,	150.05399
Carbonic Acid Gas,	22 Cub. In.
Hydrous Magnesium Sulphate,	18.83775
Hydrous Calcium Sulph.,	6.5475
Calcium Carbonate,	2.08472
Magnesium Carbonate,	4.66362
Sodium Chloride,	23.98208
Calcium Chloride,	1.28162
Alumina,	1.54424
Silica,	1.185309
Organic matter, volatile and loss,	9.805409
Trace of Iron, Iodine and Ammonia, Suspended Matter (Clay, &c.,)	11.58181

Analyzed by A. Merrell, M. D., Chemist, St. Louis, Mo.

THE ANALYSIS OF THE WEAVER WELL, SULPHUR SPRINGS, TEXAS.

Specific Gravity,	1008.1
Reaction Acid.	
Per gallon—	GRAINS.
Sulphate of Ferric Oxide,	33.421
" " Alumnia,	23.235
" " Magnesia,	24.345
" " Lime,	45.678
" " Soda,	1.342
" " Potash,	.849
Chloride Sodium,	1.360
Carbonate Lime,	4.286
Phosphate of Lime,	.633
Sclicic Acid,	1.425
Free Sulphuric Acid,	1.211
Nitrous Acid,	a trace
Organic Matter,	2.473

Analyzed by Juan H. Wright, M. D.

ST. LOUIS, MO., April 20, 1882.

J. A. Weaver, Esq.:

I enclose report of analysis. You have really a valuable water. If you could find another near, of different quality, the two would make a more famous watering place. Have physicians to test the virtue of the powder left on evaporation, in chronic ulcers, scrofulous sores, etc. Be sure and have the water experimented with as a bath, in all malarial diseases characterized by loss of tone—using also internally.

Your water has almost a prototype in the famous Cressen Springs in Pennsylvania.

Respectfully, JUAN H. WRIGHT.

THE PATE SOUR WELL—CALCIC-CALYBEATE, SULPHUR SPRINGS, TEXAS.

Specific Gravity,	1009.6
Reaction Acid.	
Calcic Sulphate, grains per gallon,	84.713
Ferric " " " "	69.194
Magnesia " " " "	22.991
Sodic Chloride, " " "	5.017
Silica, " " "	1.944
Organic and Volatile matter,	3.797
Free Sulphuric Acid,	1.321
Iodine,	a trace

Analysis made by Wright & Merrell, St. Louis, Mo.

"MANGANIC WELLS," BRYAN, TEXAS, March 29, 1884.

Dr. J. M. Willis, Wootan Wells:

DEAR SIR—Replying to yours of 15th inst., I herewith enclose analyses of my "Manganic Acid" and "Carbonic Acid" Wells, as requested, and may simply add that some of the cures effected by the use of these waters surpass anything of the kind on record. Respectfully, LEWIS MCQUEEN.

ANALYSIS OF WELL NO. 1.

Contains in one U. S. gallon of 231 cubic inches—	GRAINS.
Chloride of Sodium,	6.236
Sulphate of Potassa,	1.486
Sulphate of Iron, Alumina and Manganese,	54.764
Sulphate of Lime,	45.997
Sulphate of Magnesia,	28.056
Sulphate of Zinc,	a trace
Silica,	6.447
	142.986

Analyzed by Prof. C. F. Chandler, School of Mines, Columbia College, New York.

ANALYSIS OF WELL NO. 2.

	GRAINS.
Calcium Sulphate, per gallon,	45.66
Sodium Chloride,	4.10
Strontium Carbonate,	0.27
Iron in Sulphate and Carbonate,	10.59
Silica,	7.51
Manganese Sulphate,	0.33
Sulphate of Potassa,	Small quantity
Carbonic Acid,	Abundant

Analyzed by Prof. H. H. Dimoiddie, of the A. and M. College of Texas.

WELL NO. 3.

Not as yet analyzed, but known to possess in efficient form alterative diuretic and tonic properties of the finest character.

[NOTE.—A large quantity of matter accompanied the above report, such as circulars and other advertising media for the hotels at these watering places, and also certain letters from proprietors and others, which the publishing committee did not see proper to insert; partly because of the irrelevant nature of the papers, but principally because we do not consider this volume of transactions exactly the place to make known the hotel accommodations and rates of board. Nor is it the proper place to insert the many wonderful "cures" claimed by the proprietors; such are generally found in advertising almanacs. The publishing committee have reproduced as much of the report as has any bearing on the subject, and as much as could be made to *connect,* so as to be intelligible, the manuscript, and, in fact, the whole mass of matter being poorly prepared for publication.]

OFFICERS OF TEXAS STATE MEDICAL ASSO-
TON, TEXAS,

No. of Session.	Date of Meeting.	Place of Meeting.	Presidents.	First Vice-Presidents.
1	June, 1869....	Houston	T. J. Heard.....	R. H. Jones.....
2	June, 1870....	Houston	R. H. Jones.....	R. W. Lindsay.....
3	June, 1871....	Houston	D. R. Wallace.....	L. Hudspeth.....
4	June, 1872....	Houston	R. T. Flewellen.....	J. A. McQueen.....
5	April, 1873...	Waco.....	D. F. Stuart.....	H. W. Brown.....
6	April, 1874...	Dallas.....	A. G. Clopton.....	T. D. Wooten.....
7	April, 1875...	Austin	H. W. Brown.....	L. R. Rayfield.....
8	April, 1876...	Marshall.....	R. H. Harrison	John H. Pope.....
9	April, 1877...	Galveston	W. D. Kelley.....	George Cupples.....
10	April, 1878...	San Antonio..	George Cupples.....	R. W. White.....
11	April, 1879...	Sherman	John H. Pope.....	S. F. Matchett.....
12	April, 1880...	Brenham	A. R. Kilpatrick....	R. M. Swearingen..
13	April, 1881...	Waco.....	Ashbel Smith.....	S. F. Starley.....
14	April, 1882...	Fort Worth...	S. F. Starley.....	W. P. Burts .....
15	April, 1883...	Tyler	A. P. Brown.....	T. H. Nott.....
16	April, 1884...	Belton.....	H. C. Ghent.....	E. P. Becton.....

CIATION SINCE ITS ORGANIZATION AT HOUS-
JUNE 15, 1869.

Second Vice-Presidents.	Third Vice-Presidents.	Secretaries.	Treasurers.
D. R. Wallace	.....	A. Connell	F. Hassenberg
W. J. Locke	.....	A. Connell	W. P. Riddell
J. T. Norris	.....	A. Connell	W. P. Riddell
D. F. Stuart	.....	A. Connell	J. Larendon
J. M. Morrison	.....	S. O. Young	J. Larendon
M. H. Oliver	.....	W. A. East	J. Larendon
M. A. Taylor	R. H. Harrison	W. A. East	J. Larendon
T. W. Wiley	W. H. Park	W. A. East	J. Larendon
R. M. Swearingen	J. H. Sears	W. A. East	J. Larendon
W. E. Saunders	J. T. Field	W. A. East	J. Larendon
S. F. Starley	S. Eagen	W. A. East	J. Larendon
E. J. Beall	O. H. Seeds	R. H. L. Bibb	J. Larendon
J. W. McLaughlin	J. A. Summers	R. H. L. Bibb	J. Larendon
W. A. Adams	Joe S. Willis	W. J. Burt	J. Larendon
J. D. Osborne	Erank Allen	W. J. Burt	J. Larendon
H. H. Darr	M. Matkin	W. J. Burt	J. Larendon

CONSTITUTION

——OF THE——

TEXAS STATE MEDICAL ASSOCIATION.

ARTICLE I.

THE name and style of this Association shall be the "TEXAS STATE MEDICAL ASSOCIATION."

ARTICLE II.

The objects of this Association shall be to organize the medical profession of the State in the most efficient manner possible; to encourage a high standard of professional qualification and ethics, and to promote professional brotherhood.

ARTICLE III.

There shall be only one class of members in this Association. Every regularly educated man within the limits of the State, who is a graduate of a regular Medical College in good standing, and who adopts and conforms to the Code of Ethics of the American Medical Association, shall be eligible to membership in this body.

ARTICLE IV.

SECTION 1. The officers of this Association shall be, one President, three Vice-Presidents, one Secretary and one Treasurer.

SEC. 2. The President and Vice-Presidents shall be elected for one year; the Secretary and Treasurer shall be elected, each, for five years, and every officer shall remain in office until his successor is duly elected and installed.

ARTICLE V.

SECTION 1. It shall be the duty of the President to preside at all meetings of the Association, when present; to give the casting vote; to

see that the rules of order and decorum are enforced in all deliberations of the body; to sign the approved proceedings of each meeting, and to approve such orders as may be drawn upon the Treasurer for expenditures ordered by the Association.

SEC. 2. It shall be the duty of the first Vice-President to preside in the absence of the President, and in the absence of the President and first Vice-president, the second Vice-president shall preside, and in the absence of the President, first and second Vice-Presidents, the third Vice-President shall preside.

SEC. 3. In the absence of the President and all the Vice-Presidents, the Association shall, by ballot, elect one of its members to preside pro tem.

SEC. 4. It shall be the duty of the Secretary to keep a true and correct record of the proceedings of each meeting, preserve all books, papers and things belonging to the archives of the Association, attest all orders drawn upon the Treasurer for moneys appropriated by the Association, keep the accounts of the Association with its members, keep a register of the members, the dates of their admission and places of residence. He shall collect all moneys due from the members, and pay the same to the Treasurer, taking his receipt therefor. He shall attend all committees that may be appointed by the Association, with such documents as may be necessary for reference; report such unfinished business of previous meetings as may appear on his books, requiring action, and attend to such other business as the Association may direct. He shall also supervise and conduct all the correspondence of the Association.

SEC. 5. It shall be the duty of the Treasurer to receive all moneys delivered to him by the Secretary, passing his receipt for the same, and to pay moneys endorsed by the President and attested by the Secretary, and if required, to give bond for the faithful performance of the duties of his office.

ARTICLE VI.

Vacancies occurring in the offices of the Association shall be filled by appointment by the President. And he shall have the appointment of all committees not otherwise provided for.

ARTICLE VII.

County Medical Associations shall be entitled to two delegates to the meetings of this Association for every ten members comprising their

societies, and one for every additional five members, and shall have two votes upon all questions; and all Medical Colleges in the State, holding charters from the State, with seven professors, shall be entitled to two votes; and no member shall be allowed to vote who is not a delegate of some Association or Medical College, except such member live in a county where no Association exists, said county delegates being entitled to one vote.

[The Judicial Council interprets the meaning of Art. VII, of the Constitution as follows: "Each member of the Texas State Medical Association, who is in good standing, shall be entitled to one vote, and if he be also a delegate from a Medical Society, or College properly authorized, shall be entitled to an additional vote." County Medical Associations shall be entitled to send two delegates for the first ten members and one for each additional five members. Medical Colleges conforming to the ethics governing this Association, chartered by the State and having seven or more professors, shall be entitled to two delegates—Proceedings sixteenth session Texas State Medical Association.]

ARTICLE VIII.

This Constitution shall immediately take effect from its adoption.

BY-LAWS.

ARTICLE I.

The Texas State Medical Association shall meet annually, at such time and place as may be determined by the majority of those members attending the previous meeting.

ARTICLE II.

Fifteen members, or any number over, shall constitute a quorum for business.

ARTICLE III.

The President shall call the meeting to order, cause the Secretary to read the proceedings of the previous meeting, which, after approval, shall be adopted.

ARTICLE IV.

In case there be no quorum, the meeting shall adjourn from day to day until such quorum be had.

ARTICLE V.

The fee of admission shall be $5, United States currency, and the annual dues of each member, $2.50, United States currency.

[Amendment, adopted seventh annual session, 1875, on motion of Dr. M. A. Taylor:

Resolved, That the By-Laws of the State Medical Association be so changed as to tax the members of the Association the sum of $5 instead of $2.50 per annum, and that each member of the various County organizations be taxed the sum of $1 per annum.]

ARTICLE VI.

The usual parliamentary rules governing deliberative bodies shall govern the business workings of this Association.

ARTICLE VII.

All questions of business before this Association shall be determined

by a majority of the votes present, except as to censure or expulsion of a member, in which case a two-thirds vote shall be required.

ARTICLE VIII.

It shall be the duty of the President to deliver, at each annual meeting of this Association, an address, and, in addition, the Association shall elect by ballot, one member to read an essay upon some medical subject of his own selection.

ARTICLE IX.

A committee of one member from each county represented shall constitute a Committee on Nominations for officers and place of meeting. Said committee shall report action one day prior to adjournment.

ARTICLE X.

No member of this Association, or delegate, shall absent himself from a meeting of this Association without special permission of the President, or from the session without the consent of the Association; the sense of the Association to be taken by vote.

ARTICLE XI.

The Secretary of the Association shall receive, as a compliment, at each annual session, a draft order from the President upon the Treasurer, for the sum of two hundred dollars, for valuable services rendered the Association; said order to be paid by the Treasurer; and he shall also be allowed to draw upon the Treasurer, as usual, for expenses incident to the office.

ARTICLE XII.

It shall be the duty of the President, three months prior to each annual meeting of this Association, to notify, by circular, the profession of the State and county organizations throughout the State, and urge attendance.

JUDICIAL COUNCIL.

A Council, consisting of twelve members, shall be appointed by the Nominating Committee, whose duty it shall be to take cognizance of, and decide, all questions of an Ethical or Judicial character that may arise in connection with the Association. Of the twelve members of the Council first appointed, the four first named on the list shall hold office for one year, the second four named shall hold office two years,

and the third four named shall hold office three years; so that four new members shall be appointed each year, who shall hold office three years.

The said Council shall organize by choosing a President and Secretary, and shall keep a permanent record of its proceedings. The decisions of said Council, on all matters referred to it by the Association, shall be final, and shall be reported to the Association at the earliest practicable moment.

All questions of a personal character, including complaints and protests, and all questions on credentials, shall be referred at once, after the report of the Committee of Arrangements or other presentation, to the Judicial Council, and without discussion.

SECTIONS.

The general meeting of the Association shall be restricted to the morning sessions; and the afternoon sessions, commencing at three o'clock, shall be devoted to the hearing of reports and papers and their consideration, in the following sections:

1st—Practical Medicine, Materia Medica, and Physiology.
2nd—Obstetrics, and Diseases of Women and Children.
3rd—Surgery and Anatomy.
4th—Medical Jurisprudence, Chemistry and Psychology.
5th—State Medicine and Public Hygiene.
6th—Gynæcology.
7th—Ophthalmology and Otology.
8th—Dermatology and Medical Botany.

The Chairman and Secretary of the several sections shall, like other officers of the Association, be nominated by the special committee of one member from each county represented at the meeting, and elected by a vote on a general ticket. They shall hold their office until the close of the proper business of the annual meeting, next succeeding their election, and until their successors are appointed.

The section on State Medicine and Public Hygiene shall be composed of one member from each county, representing, as far as practicable, the County Board of Health. The officers of this section to be also designated by the Committee of Nomination.

The Chairman of the several sections shall prepare and read in the general sessions of the Association, papers on the advances and discoveries of the past year in the branch of science, included in their

respective sections; the reading of such papers not to occupy longer than forty minutes for each.

Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the Secretary of the appropriate sections at least one month before the meeting which is to act upon them. It shall be the duty of the Secretary, to whom such papers are sent, to examine them with care, and, with the advice of the Chairman of his section, to determine the time and order of their presentation, and to give due notice of the same; and after their full examination and discussion by the section, they shall be sent to the Permanent Secretary of the Association.

No paper shall be read before either of the sections, the reading of which occupies more than twenty minutes. Such papers shall be referred by the section to sub-committees especially appointed for their examination. The sub-committees shall be allowed thirty days for such examination; at the end of which time they shall forward the papers to the Committee of Publication, with such recommendations as they may deem proper. The author of such papers, however, may read abstracts before the section within the allotted twenty minutes. No member shall address the section more than once upon the same subject, nor speak longer than fifteen minutes without unanimous consent. All papers presented directly to the Association, and other matters, may, at the discretion of the Association, be referred to the various sections for their consideration and report.

STANDING COMMITTEES.

The following are the standing committees of the Association to be filled by the Committee on Nominations, and to report at the next annual meeting subsequent to their appointment, viz.: Committee of Arrangements, Committee of Publication, Committee on Prize Essays, and Committee on Texas State Medical Necrology.

The Committee of Publication shall append to each volume of the Transactions hereafter published, a copy of the Constitution, By-Laws, Code of Ethics of the Association, and a complete list of all members in full fellowship, and their respective places of abode.

It shall print conspicuously at the beginning of each volume of the Transactions, the following disclaimer, viz: The Texas State Medical Association, although formally accepting and publishing the reports of

the various standing committees, holds itself wholly irresponsible for the opinions, theories, or criticisms therein contained, except when otherwise decided by special resolution.

The Committee on Prize Essays shall consist of five members, residing in the same neighborhood, whose duty it shall be, in the interval between the present and the next succeeding annual sessions, to receive original papers upon any medical subject, from any person who may choose to send them; to decide upon the merits of these papers, and to select for presentation to the Association, at its next session, such as they may deem worthy of being thus presented. The committee shall have power to form such regulations, as to the mode in which the papers are to be presented, and as to the observing of secrecy, as they may think proper; and also to award one prize of one hundred dollars to the best original communication reported on favorably by them, and directed by the Association to be published.

The Committee on Texas State Medical Necrology shall consist of one member for each county represented in the Association, whose duty it shall be to procure memorials of the eminent and worthy dead among the distinguished physicians of their respective counties, and transmit them to the chairman of this committee, on or before the first of April of each and every year.

THE PUBLICATION OF PAPERS AND REPORTS.

No paper or report shall be entitled to publication in the volume, for the year in which it shall be presented to the Association, unless it be placed in the hands of the Committee of Publication on or before the first day of July. It must also be so prepared as to require no material alteration or addition at the hands of its author.

Authors of papers are required to return their proofs within two weeks after their reception; otherwise they will be passed over and omitted from the volume.

The Committee of Publication shall have full discretionary power to omit from the published Transactions, in part, or in whole, any paper that may be referred to it by the Association or either of the sections, unless specially instructed to the contrary by vote of the Association.

ORDINANCES.

Resolved, That the several sections of this Association be requested in the future to refer no papers or reports to the Committee of Publica-

tion, except such as can be fairly classed under one of the three following heads, viz:

1. Such as may contain and establish POSITIVELY news facts, modes of practice, or principles of real value.

2. Such as may contain the results of well-devised original experimental researches.

3. Such as present so complete a review of the fact on any particular subject as to enable the writer to deduce therefrom legitimate conclusions of importance.

Resolved, That the several sections be requested, in the future, to refer all such papers as may be presented to them for examination by this Association, that contain matter of more or less value, and yet can not be fairly ranked under either of the heads mentioned in the foregoing resolution, back to their authors, with the recommendation that they be published in such regular medical periodicals as said author may select, with the privilege of placing at the head of such papers: "Read to the —— —— Section of the Texas State Medical Association on the —— day of ——— 188—."

Resolved, That at the future meetings of the Texas State Medical Association no report of Standing Committees or communications shall be read before the Association which exceeds twenty pages of letter paper. (Vide *Trans.* Seventh An. Ses., p. 33.)

Resolved, That in the opinion of this Association, towns, cities, and corporations should not rely upon quarantine alone, as preventive of yellow fever, since in these days of rapid inter-communication, absolute quarantine is impracticable. We therefore recommend the strictest hygienic measures—complete drainage, removal of all putrescent accumulations, animal or vegetable—as promising the best means of protection. (Vide *Trans.* Seventh An. Ses., p. 32.)

Resolved, That we, as an Association, and members of the medical profession, have not arrayed ourselves in opposition to the Press. We recognize in it a power second to no other, when properly exerted, to effect much good; yet we feel that the placarding and advertising resorted to by quacks, and even, sometimes, by ostensible members of our Associations, is highly reprehensible, in that they make false assurances and promise cures not warranted by science; but between these and the true physician, having the good of humanity alone in view, and a strict regard for truth, the Press has heretofore failed to make any distinction—stating whatever the imposter may pay for, without any

regard to the merit of the party. Therefore, the public at large, as well as the medical profession, have reasonably concluded that he who thus asserts his claims to superior merit, even though he may wear the badge of membership to our Association, is a quack, charlatan and imposter, trading in his profession, and bidding for the confidence of the ignorant and credulous. (Vide *Trans.* Seventh An. Ses., p. 19.)

Resolved, That all members of this Association in arrears for dues, over three years, shall stand suspended, and their names be dropped from the roll; the same to be reinstated at any time by paying up all back dues. It shall be the duty of the Secretary to notify all members behind for dues, immediately after the adjournment of this body, and request immediate payment. (Vide *Trans.* Eighth An. Ses., p. 21.)

Resolved, That all physicians, recognized as members in the original organization of the Association, be permitted to perfect their membership by the payment of the regular fees and dues to date. (Vide *Trans.* Eighth An. Ses., p. 28.)

Resolved, That County Societies be requested to furnish a list of physicians in the county, as well as of members; to give population of county, number of births, deaths, cause of death, age at death, sex and race; diseases that have prevailed; localities, with a description of the latter, in order to ascertain, if possible, the causes of disease; also, an abstract of contents of papers read, an abstract of discussions, surgical operations and results. (Vide *Trans.* Eighth An. Ses., p. 31.)

Resolved, That the State Medical Association, anxious as it is to do all in its power to prevent the appearance of yellow fever or other malignant disease, or to mitigate their severity should any portion of our State be visited, do hereby advise and earnestly urge upon the authorities and people of all localities liable to be visited by such diseases, the prompt adoption of a rigid enforcement of proper sanitary regulations, and to appoint Boards of Health, through whom the proper rules for ventilation, fumigation and disinfection can be efficiently enforced.

Adopted and referred to the Committee on State Board of Health. (Vide *Trans.* Eighth An. Ses., p. 22.)

CODE OF MEDICAL ETHICS.

OF THE DUTIES OF PHYSICIANS TO THEIR PATIENTS, AND OF THE OBLIGATIONS OF PATIENTS TO THEIR PHYSICIANS.

ARTICLE I.—*Duties of Physicians to their Patients.*

SECTION 1. A physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission, and the responsibility he habitually incurs in its discharge. These obligations are the more deep and enduring, because there is no tribunal otherwise than his own conscience to adjudge penalties for carelessness or neglect. Physicians should, therefore, minister to the sick with due impressions of importance of their office; reflecting that the ease, the health, and the lives of those committed to their charge, depend on their skill, attention and fidelity. They should study, also, in their deportment, so to unite *tenderness* with *firmness,* and *condescension* with *authority,* as to inspire the minds of their patients with gratitude, respect and confidence.

SEC. 2. Every case committed to the charge of a physician should be treated with attention, steadiness and humanity. Reasonable indulgence should be granted to the mental imbecility and caprices of the sick. Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion, and with the most scrupulous regard to fidelity and honor. The obligation of secrecy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance should ever be divulged by the physician except when he is imperatively required to do so. The force and necessity of

this obligation are indeed so great, that professional men have, under certain circumstance, been protected in their observance of secrecy by courts of justice.

SEC. 3. Frequent visits to the sick are in general requisite, since they enable the physician to arrive at a more perfect knowledge of the disease—to meet promptly every change which may occur, and also tend to preserve the confidence of the patient. But unnecessary visits are to be avoided, as they give useless anxiety to the patient, tend to diminish the authority of the physician, and render him liable to be suspected of interested motives.

SEC. 4. A physician should not be forward to make gloomy prognostications, because they savor of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely notice of danger when it really occurs; and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming when executed by him, that it ought to be declined whenever it can be assigned to any other person of sufficient judgment and delicacy. For the physician should be the minister of hope and comfort to the sick; that, by such cordials to the drooping spirit, he may smooth the bed of death, revive expiring life, and counteract the depressing influence of those maladies which often disturb the tranquility of the most resigned in their last moments. The life of a sick person can be shortened not only by the acts, but also by the words or the manner of a physician. It is, therefore, a sacred duty to guard himself carefully in this respect, and to avoid all things which have a tendency to discourage the patient and to depress his spirits.

SEC. 5. A physician ought not to abandon a patient because the case is deemed incurable; for his attendance may continue to be highly useful to the patient, and comforting to the relatives around him, even in the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish. To decline attendance, under such circumstances, would be sacrificing to fanciful delicacy and mistaken liberality, that moral duty, which is independent of, and far superior to, all pecuniary consideration.

SEC. 6. Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice.

SEC. 7. The opportunity which a physician not unfrequently enjoys

of promoting and strengthening the good resolutions of his patients, suffering under the consequences of vicious conduct, ought never to be neglected. His counsels, or even remonstrances, will give satisfaction, not offence, if they be proffered with politeness, and evince a genuine love of virtue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

ARTICLE II.—*Obligations of patients to their physicians.*

SECTION 1. The members of the medical profession, upon whom is enjoined the performance of so many important and arduous duties toward the community, and who are required to make so many sacrifices of comfort, ease and health, for the welfare of those who avail themselves of their services, certainly have a right to expect and require that their patients should entertain a just sense of the duties which they owe to their medical attendants.

SEC. 2. The first duty of a patient is to select as his medical adviser one who has received a regular professional education. In no trade or occupation do mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowledge is intuitive.

SEC. 3. Patients should prefer a physician whose habits of life are regular, and who is not devoted to company, pleasure, or to any pursuit incompatible with his professional obligations. A patient should, also, confide the care of himself and family, as much as possible, to one physician; for a medical man who has become acquainted with the peculiarities of constitution, habits, and predisposition of those he attends, is more likely to be successful in his treatment than one who does not possess that knowledge.

A patient who has thus selected his physician should always apply for advice in what may appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

SEC. 4. Patients should faithfully and unreservedly communicate to their physician the supposed cause of their disease. This is more important, as many diseases of a mental origin simulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his

physician his friend and adviser; he should always bear in mind that a medical man is under the strongest obligations of secrecy. Even the female sex should never allow feelings of shame or delicacy to prevent their disclosing the seat, symptoms, and causes of complaints peculiar to them. However commendable a modest reserve may be in the common occurrences of life, its strict observance in medicine is often attended with the most serious consequences, and a patient may sink under a painful and loathsome disease, which might have been readily prevented had timely intimation been given to the physician.

SEC. 5. A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude upon his physician the details of his business nor the history of his family concerns.

SEC. 6. The obedience of a patient to the prescriptions of his physician should be prompt and explicit. He should never permit his own crude opinions as to their fitness to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drink and exercise. As patients become convalescent, they are very apt to suppose that the rules prescribed for them may be disregarded, and the consequence, but too often, is a relapse. Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self-constituted doctors and doctresses who are so frequently met with, and who pretend to possess infallible remedies for the cure of every disease. However simple some of their prescriptions may appear to be, it often happens that they are productive of much mischief, and in all cases they are injurious, by contravening the plan of treatment adopted by the physician.

SEC. 7. A patient should, if possible, avoid even the *friendly visits of a physician* who is not attending him—and when he does receive them, he should never converse on the subject of his disease, as an observation may be made, without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians

should act in concert; for, although their modes of treatment may be attended with equal success when employed singly, yet conjointly they are very likely to be productive of disastrous results.

SEC. 8. When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing.

SEC. 9. Patients should always, when practicable, send for their physician in the morning, before his usual hour of going out; for by being early aware of the visits he has to pay during the day, the physician is able to apportion his time in such a manner as to prevent an interference of engagements. Patients should also avoid calling on their medical adviser unnecessarily during the hours devoted to meals or sleep. They should always be in readiness to receive the visits of their physician, as the detention of a few minutes is often of serious inconvenience to him.

SEC. 10. A patient should, after his recovery, entertain a just and enduring sense of the value of the services rendered him by his physician; for these are of such a character, that no mere pecuniary acknowledgment can repay or cancel them.

OF THE DUTIES OF PHYSICIANS TO EACH OTHER, AND TO THE PROFESSION AT LARGE.

ARTICLE I.—*Duties for the support of professional character.*

SECTION 1. Every individual on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness. He should, therefore, observe strictly such laws as are instituted for the government of its members; — should avoid all contumelious and sarcastic remarks relative to the faculty as a body; and while, by unwearied diligence, he resorts to every honorable means of enriching the science, he should entertain a due respect for his seniors, who have, by their labors, brought it to the elevated condition in which he finds it.

SEC. 2. There is no profession, from the members of which greater purity of character, and a higher standard of moral excellence are required, than the medical; and to attain such eminence is a duty every physician owes alike to his profession and to his patients. It is due to the latter, as without it he cannot command their respect and confidence, and to both, because no scientific attainments can compensate

for the want of correct and moral principles. It is also incumbent upon the faculty to be temperate in all things, for the practice of physic requires the unremitting exercise of a clear and vigorous understanding; and, on emergencies, for which no professional should be unprepared, a steady hand, an acute eye, and an unclouded head may be essential to the well being, and even to the life, of a fellow-creature.

SEC. 3. It is derogatory to the dignity of the profession to resort to public advertisements, or private cards, or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor, gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made; to invite laymen to be present at operations, to boast of cures and remedies, to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

SEC. 4. Equally derogatory to professional character is it for a physician to hold a patent for any surgical instrument or medicine; or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself or of others. For, if such nostrum be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and if mystery alone give it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice. It is also reprehensible for physicains to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them.

ARTICLE II.—*Professional services of physicians to each other.*

SECTION 1. All practitioners of medicine, their wives and their children while under the paternal care, are entitled to the gratuitous services of any one or more of the faculty residing near them, whose assistance may be desired. A physician afflicted with disease is usually an incompetent judge of his own case; and the natural anxiety and solicitude which he experiences at the sickness of a wife, a child or any one who, by the ties of consanguinity, is rendered peculiarly dear to him, tend to obscure his judgment, and produce timidity and irresolution in his practice. Under such circumstances, medical men are peculiarly dependent upon each other, and kind offices and professional aid should always be cheerfully and gratuitously afforded. Visits

ought not, however, to be obtruded officiously; as such unasked civility may give rise to embarrassment, or interfere with that choice on which confidence depends. But, if a distant member of the faculty, whose circumstances are affluent, request attendance, and an honorarium be offered, it should not be declined; for no pecuniary obligation ought to be imposed, which the party receiving it would wish not to incur.

ARTICLE III.—*Of the duties of physicians as respecting vicarious offices.*

SECTION 1. The affairs of life, the pursuit of health, and the varouis accidents and contingencies to which a medical man is peculiarly exposed, sometimes require him temporarily to withdraw from his duties to his patients, and to request some of his professional brethren to officiate for him. Compliance with this request is an act of courtesy, which should always be performed with the utmost consideration for the interest and character of the family physician, and when exercised for a short period, all the pecuniary obligations for such service should be awarded him. But if a member of the profession neglects his business in quest of pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long continued exercise of this fraternal courtesy, without awarding to the physician who officiates, the fees arising from the discharge of his professional duties.

In obstetrical and important surgical cases, which give rise to unusual fatigue, anxiety and responsibility, it is just that the fees accruing therefrom should be awarded to the physician who officiates.

ARTICLE IV.—*Of the duties of physicians in regard to consultation.*

SECTION 1.—A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honors of his profession. Nevertheless, as in consultations the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practice from some medical board of known and acknowledged respectability, recognized by this Association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, or his aid refused in consultation, when it is requested by the patient. But no one can be considered as a regular practitioner or a fit associate in consultation, whose practice

is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry.

SEC. 2. In consultations, no rivalship or jealousy should be indulged; candor, probity and all due respect should be exercised towards the physician having charge of the case.

SEC. 3. In consultations, the attending physician should be the first to propose the necessary questions to the sick; after which the consulting physician should have the opportunity to make such further inquiries of the patient as may be necessary to satisfy him of the true character of the case. Both physicians should then retire to a private place for deliberation; and the one first in attendance should communicate the directions agreed upon to the patient or his friends, as well as any opinions which it may be thought proper to express. But no statement or discussion of it should take place before the patient or his friends, except in the presence of all the faculty attending, and by their common consent; and no *opinions* or *prognostications* should be delivered which are not the result of previous deliberation and concurrence.

SEC. 4. In consultations, the physician in attendance should deliver his opinion first; and when there are several consulting, they should deliver their opinions in the order in which they have been called in. No decision, however, should restrain the attending physician from making such variations in the mode of treatment as any subsequent unexpected change in the character of the case may demand. But such variation, and the reasons for it, ought to be carefully detailed at the next meeting in consultation. The same privilege belongs also to the consulting physician if he is sent for in an emergency, when the regular attendant is out of the way, and similar explanations must be made by him at the next consultation.

SEC. 5. The utmost punctuality should be observed in the visits of physicians when they are to hold consultation together, and this is generally practicable, for society has been considerate enough to allow the plea of professional engagement to take precedence of all others, and to be an ample reason for the relinquishment of any present occupation. But as professional engagements may sometimes interfere, and delay one of the parties, the physician who first arrives should wait for his associate a reasonable period, after which the consultation should be considered as postponed to a new appointment. If it be the attending physician who is present, he will of course see the patient

and prescribe; but if it be the consulting one, he should retire, except in case of emergency, or when he has been called from a considerable distance, in which latter case he may examine the patient, and give his opinion in writing, and under seal, to be delivered to his associate.

SEC. 6. In consultations theoretical discussions should be avoided, as occasioning perplexity and loss of time.. For there may be much diversity of opinion concerning speculative points, with perfect agreement in those modes of practice which are founded, not on hypothesis, but on experience and observation.

SEC. 7. All discussions in consultation should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants—they must equally share the credit of success as well as the blame of failure.

SEC. 8. Should any irreconcilable diversity of opinion occur when several physicians are called upon to consult together, the opinion of the majority should be considered as decisive; but if the numbers be equal on each side, then the decision should rest with the attending physician. It may, moreover, sometimes happen that two physicians cannot agree in their views of the nature of the case, and the treatment to be pursued. This is a circumsiance much to be deplored, and should always be avoided, if possible, by mutual concessions, as far as they can be justified by a conscientious regard for the dictates of judgment. But in the event of its occurrence, a third physician should, if practicable, be called to act as umpire; and, if circumstances prevent the adoption of this course, it must be left to the patient to select the physician in whom he is most willing to confide. But, as every physician relies upon the rectitude of his judgement, he should, when left in the minority, politely and consistently retire from any further deliberation in the consultation, or participation in the management of the case.

SEC. 9. As circumstances sometimes occur to render a special consultation desirable, when the continued attendance of two physicians might be objectionable to the patient, the member of the faculty whose assistance is required in such cases should sedulously guard against all future unsolicited attendance. As such consultations require an extraordinary portion both of time and attention, at least a double honorarium my be reasonably expected.

SEC. 10. A physician who is called upon to consult, should observe

the most honorable and scrupulous regard for the character and standing of the practitioner in attendance; the practice of the latter, if necessary, should be justified as far as it can be, consistently with a conscientious regard for truth, and no hint or insinuation should be thrown out which could impair the confidence reposed in him, or affect his reputation. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favor of families and individuals.

ARTICLE V.—*Duties of physicians in cases of interference.*

SECTION 1. Medicine is a liberal profession, and those admitted into its ranks should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice.

SEC. 2. A physician, in his intercourse with a patient under the care of another practitioner, should observe the strictest caution and reserve. No meddling inquiries should be made—no disingenuous hints given relative to the nature and treatment of his disorder; nor any course of conduct pursued that may directly or indirectly tend to diminish the trust reposed in the physician employed.

SEC. 3. The same circumspection and reserve should be observed when, from motives of business or friendship, a physician is prompted to visit an individual who is under the direction of another practitioner. Indeed, such visits should be avoided, except under peculiar circumstances; and when they are made, no particular inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

SEC. 4. A physician ought not to take charge of or prescribe for a patient who has recently been under the care of another member of the faculty in the same illness, except in cases of sudden emergency, or in consultation with the physician previously in attendance, or when the latter has relinquished the case, or been regularly notified that his services are no longer desired. Under such circumstances no unjust and illiberal insinuations should be thrown out in relation to the conduct or practice previously pursued, which should be justified as far as candor and regard for truth and probity will permit; for it often happens that patients become dissatisfied when they do not experience

immediate relief, and, as many diseases are naturally protracted, the want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

SEC. 5. When a physician is called to an urgent case, because the family attendant is not at hand, he ought, unless his assistance in consultation be desired, to resign the care of the patient to the latter immediately on his arrival.

SEC. 6. It often happens in cases of sudden illness, or of recent accidents and injuries, owing to the alarm and anxiety of friends, that a number of physicians are simultaneously sent for. Under these circumstances, courtesy should assign the patient to the first who arrives, who should select from those present any additional assistance that he may deem necessary. In all such cases, however, the practitioner who officiates should request the family physician, if there be one, to be called, and, unless his further attendance be requested, should resign the case to the latter on his arrival.

SEC. 7. When a physician is called to the patient of another practitioner, in consequence of the sickness or absence of the latter, he ought, on the return or recovery of the regular attendant, and with the consent of the patient, to surrender the case.

[The expression "patient of another practitioner," is understood to mean a patient who may have been under the charge of another practitioner at the time of the attack of sickness, or departure from home of the latter, or who may have called for his attendance during his absence or sickness, or in any other manner given it to be understood that he regarded the said physician as his regular medical attendant.]

SEC. 8. A physician, when visiting a sick person in the country, may be desired to see a neighboring patient who is under the regular direction of another physician, in consequence of some sudden change or aggravation of symptoms. The conduct to be pursued on such an occasion is to give advice adapted to present circumstances; to interfere no further than is absolutely necessary with the general plan of treatment; to assume no future direction unless it be expressly desired; and, in this last case, to request an immediate consultation with the practitioner previously employed.

SEC. 9. A wealthy physician should not give advice *gratis* to the affluent; because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common

funds for its support, when fees are dispensed with which might justly be claimed.

SEC. 10. When a physician, who has been engaged to attend a case of midwifery, is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he is entitled to the fee, but should resign the patient to the practitioner first engaged.

ARTICLE VI.—*Of differences between physicians.*

SECTION 1. Diversity of opinion and opposition of interest may, in the medical as in other professions, sometimes occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians or a *court-medical.*

SEC. 2. As peculiar reserve must be maintained by physicians toward the public in regard to professional matters, and as there exist numerous points in medical ethics and etiquette through which the feelings of medical men may be painfully assailed in their intercourse with each other, and which cannot be understood or appreciated by general society, neither the subject-matter of such differences nor the adjudication of the arbitrators should be made public, as publicity in a case of this nature may be personally injurious to the individuals concerned, and can hardly fail to bring discredit on the faculty.

ARTICLE VII.—*Of pecuniary acknowledgments.*

Some general rules should be adopted by the faculty, in every town or district, relative to *pecuniary acknowledgments* from their patients; and it should be deemed a point of honor to adhere to these rules with as much uniformity as varying circumstances will admit.

OF THE DUTIES OF THE PROFESSION TO THE PUBLIC, AND OF THE OBLIGATIONS OF THE PUBLIC TO THE PROFESSION.

ARTICLE I.—*Duties of the profession to the public.*

SECTION 1. As good citizens, it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens; they should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on subjects of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations—the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions—in relation

to the medical police of towns, as drainage, ventilation, etc.—and in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger and to continue their labors for the alleviation of the suffering, even at the jeopardy of their own lives.

SEC. 2. Medical men should also be always ready, when called on by the legally constituted authorites, to enlighten coroners' inquests and courts of justice, on subjects strictly medical—such as involve questions relating to sanity, legitimacy, murder by poisons or other violent means, and in regard to the various other subjects embraced in the science of Medical Jurisprudence. But in these cases, and especially where they are required to make a *post mortem* examination, it is just, in consequence of the time, labor and skill required, and the responsibility and risk they incur, that the public should award them a proper honorarium.

SEC. 3. There is no profession by the members of which eleemosynary services are more liberally dispensed than the medical, but justice requires that some limits should be placed to the performance of such good offices. Poverty, professional brotherhood, and certain of the public duties referred to in the first section of this article, should always be recognized as presenting valid claims for gratuitious services; but neither institutions endowed by the public or by rich individuals, societies for mutual benefit, for the insurance of lives or for analogous purposes, nor any profession or occupation, can be admitted to possess such privilege. Nor can it be justly expected of physicians to furnish certificates of inability to serve on juries, to perform militia duty, or to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like without a pecuniary acknowledgment. But to individuals in indigent circumstances, such professional service should always be cheerfully and freely accorded.

SEC. 4. It is the duty of physicians, who are frequent witnesses of the enormities committed by quackery, and the injury to health and even destruction of life caused by the use of quack medicines, to enlighten the public on these subjects, to expose the injuries sustained by the unwary from the devices and pretensions of artful impirics and imposters. Physicians ought to use all the influence which they may possess, as professors in Colleges of Pharmacy, and by exercising their option in regard to the shops to which their prescriptions shall be sent, to discourge druggists and apothecaries from vending quack or secret

medicines, or from being in any way engaged in their manufacture and sale.

ARTICLE II.—*Obligations of the public to physicians.*

SEC. 1. The benefits accruing to the public, directly and indirectly, from the active and unwearied beneficence of the profession, are so numerous and important, that physicians are justly entitled to the utmost consideration and respect from the community. The public ought likewise to entertain a just appreciation of medical qualifications; to make a proper discrimination between true science and the assumptions of ignorance and empiricism—to afford every encouragement and facility for the acquisition of medical education—and no longer to allow the statute-books to exhibit the anomally of exacting knowledge from physicians, under a liability to heavy penalties, and of making them obnoxious to punishment for resorting to the only means of obtaining it.

Resolved, That this Association recognizes specialties as proper and legitimate fields of practice.

Resolved, That specialists shall be governed by the same rules of professional etiquette as have been laid down for general practitioners.

Resolved, That it shall not be proper for specialists publicly to advertise themselves as such, or to assume any title not specially granted by a regularly chartered college.

Resolved, That private handbills addressed to members of the medical profession, or by cards in medical journals, calling the attention of professional brethren to themselves as specialists, be declared in violation of the Code of Ethics of the American Medical Association. (Vide *Trans.* A. M. A., vol. xx., p. 28.)

WHEREAS, The proper construction of Art. IV., Sec. 1, Code of Ethics, A. M. A., having been called for, relative to consultation with irregular practitioners who are graduates of schools:

Resolved, That said Art. IV., Sec. 1, Code of Ethics, excludes all such practitioners from recognition by the regular profession. (Vide *Trans.* A. M. A., vol. xx., p. 30.)

WHEREAS, The contract system is contrary to medical ethics:

Resolved, That all contract physicians, as well as those guilty of bidding for practice at less rates than those established by a majority of regular graduates of the same locality, be classed as irregular practitioners. (Vide *Trans.* A. M. A., vol. xx., p. 41.)

Resolved, That the members of the medical profession who in any way aid or abet the graduation of medical students in irregular or exclusive systems of medicine, are deemed thereby to violate the spirit of the ethics of the American Medical Association. (Vide *Trans.* A. M. A., vol. xxvii., p. 48.)

ROLL OF MEMBERS OF THE STATE MEDICAL ASSOCIATION.

Adams, W. A., Fort Worth.
Adair, J. B., Houston.
Adams, J. G., Hearne.
Archer, W. A., Houston.
Atcheson, Alex. W., Denison.
Adams, S. P., Mt. Pleasant.
Ashworth, C. P., Fort Worth.
Allen, Frank, Lexington.
Armstrong, A. M., Crawford.
Brooks, W. B., Fort Worth.
Birdsong, M. J., Greenville.
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Barham, S. H., Mt. Enterprise.
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Beall, E. J., Fort Worth.
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Burts, W. P., Fort Worth.
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Batte. L. T., Belton.
Caldwell, Beverly, Waco.
Connerly, T. W., Jefferson.
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MALTINE will convert thirty-three times its weight of starch at 140° Fahr. in 16 minutes.

In proof of these statements, we beg to submit the following chemical analyses made from samples bought by the analysts out of stock in the open market:

By WILLIAM ROBERTS, M.D., F.R.S., Physician to the Manchester Royal Infirmary and Professor of Clinical Medicine to Owens' Medical College.—"If properly prepared, Malt Extracts are rich in Diastase, and have a power in digesting starchy matters. But you will be surprised to learn, as I was, that a large proportion of the Malt Extracts of Commerce have no action on starch. Out of fourteen trade samples of Malt Extract examined by Messrs. Dunston and Dimmock, only three possessed the power of acting on starch. These brands were MALTINE, Corbyn, Stacy & Co.'s Extract, and Keppler's Malt Extract."—[British Medical Journal.

PROF. R. H. CHITTENDEN, of Yale University.—"'MALTINE' far exceeds in diastatic power any of the six preparations of malt which I have examined. Ten grains of 'MALTINE,' warmed at 63-65° C., for fifteen minutes with 125 grains of starch in five oz. of water in the form of paste, formed from the starch 7.43 grains of sugar, calculated as dextrose. Ten grains of Trommer's Extract of Malt, under similar conditions, formed during the same length of time 1.47 grains of sugar, calculated as dextrose."

PROF. ATFIELD, F.R.S., F.I.C F.C.S., etc., Oct. 8, 1883.—"I now find that 'MALTINE' contains from three to five times as much Diastase as any Extract of Malt in the market."

PROF. WALTER S. HAINES, A. M., M D, Rush Med College, Chicago, Dec. 13, 1883.—"'MALTINE' will convert a much larger amount of starch into sugar than any of the Malt Extracts examined, and I therefore regard it as the best Malt preparation with which I am acquainted."

PROF. ALBERT B. PRESCOTT, M. D., F.C.S., Univ. Mich. Jan. 7, 1884.—'MALTINE' converts thirty-three times its weight of starch. Trommer's Extract of Malt converts sixteen times its weight of starch."

LIST OF MALTINE PREPARATIONS:

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ALTINE with Beef and Iron.
ALTINE with Cod Liver Oil.
ALTINE with Cod Liver Oil & Pancreatine.
ALTINE with Hypophosphites.
ALTINE with Phosphorous Comp.
ALTINE with Peptones.
MALTINE with Pepsin and Pancreatine.
MALTINE with Phosphates.
MALTINE with Phosphates, Iron and Quinia.
MALTINE with Phos. Iron, Quinia & Strych.
MALTINE Ferrated.
MALTINE WINE.
MALTINE WINE with Pepsin & Pancreatine.
MALTO-YERBINE.
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TRANSACTIONS

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ERRATA.

Page 19, for "Dr. Slatnaker," read Dr. Stalnaker.

Page 23, for "osteogentic," read osteogenesis.

Page 26, part of report omitted; copy not furnished by Secretary.

Page 128, for "mendicants," read medicaments.

Page 27, in Sec. 7, second line, insert "dollars" between "fifteen" and "of which."

Page 69, for "typhlitis," read typhilitis.

Page 83, for "prescribed," read prescribe; and for "typoid" and "typus," read typhoid, and typhus.

Page 95, insert "drop" after "give 1" (of fl. ext. aconite).

Page 113, for "bicromate of quinine," read bimuriate of quinine, etc.

THE TEXAS STATE MEDICAL ASSOCIATION, although formally accepting and publishing the reports of the various Sections and Committees, holds itself wholly irresponsible for the opinions, theories or criticisms therein contained, except when otherwise decided by special resolution.